According to OSHA Hazard Communication Standard, 29 CFR

1910.1200

Version 1.2 Revision Date: 07/07/2015 Print Date: 07/08/2015

## **SECTION 1. IDENTIFICATION**

Product name : FormulaShell SAE 10W-30 Motor Oil

Product code : 001D7227

Manufacturer or supplier's details

Manufacturer/Supplier : Shell Oil Products US

P.O. Box 4427

Houston TX 77210-4427

USA

SDS Request : (+1) 877-276-7285

Customer Service

**Emergency telephone number** 

Spill Information : 877-504-9351 Health Information : 877-242-7400

Recommended use of the chemical and restrictions on use

Recommended use : Engine oil.

#### **SECTION 2. HAZARDS IDENTIFICATION**

## **GHS Classification**

Not a hazardous substance or mixture.

**GHS Label element** 

Hazard pictograms : No Hazard Symbol required

Signal word : No signal word

Hazard statements : PHYSICAL HAZARDS:

Not classified as a physical hazard under GHScriteria.

**HEALTH HAZARDS:** 

Not classified as a health hazard under GHS criteria.

**ENVIRONMENTAL HAZARDS:** 

Not classified as an environmental hazard under GHS criteria.

Precautionary statements : **Prevention:** 

No precautionary phrases.

Response:

No precautionary phrases.

Storage:

No precautionary phrases.

Disposal:

No precautionary phrases.

## Other hazards which do not result inclassification

Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.

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Used oil may contain harmful impurities. Not classified as flammable but will burn.

The classification of this material is based on OSHA HCS 2012 criteria.

Under normal conditions of use or in a foreseeable emergency, this product does not meet the definition of a hazardous chemical when evaluated according to the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### SECTION 3. COMPOSITION/INFORMATION ONINGREDIENTS

Chemical nature : Highly refined mineraloil.

Synthetic base oil and additives.

The highly refined mineral oil contains <3% (w/w) DMSO-

extract, according to IP346.

\* contains one or more of the following CAS-numbers: 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-65-0, 68037-01-4, 72623-86-0, 72623-87-1, 8042-47-5, 848301-69-

## **Hazardous components**

Chemical Name	Synonyms	CAS- No.	Concentration (%)
Polyolefin Amide Alkeneamine Polyol		308070-26-0	1-3
Alkaryl amine		112-90-3	1-3
Interchangeable low viscosity base oil (<20,5 cSt @40°C) *		64742-54-7 and 848301-69-9	0 - 94

## **SECTION 4. FIRST-AID MEASURES**

General advice : Not expected to be a health hazard when used under normal

conditions.

If inhaled : No treatment necessary under normal conditions of use.

If symptoms persist, obtain medical advice.

: Remove contaminated clothing. Flush exposed area with wa-In case of skin contact

ter and follow by washing with soap if available. If persistent irritation occurs, obtain medical attention.

In case of eye contact : Flush eye with copious quantities of water.

If persistent irritation occurs, obtain medical attention.

: In general no treatment is necessary unless large quantities If swallowed

are swallowed, however, get medical advice.

Most important symptoms and effects, both acute and

delayed

: Oil acne/folliculitis signs and symptoms may include formation of black pustules and spots on the skin of exposed areas. Ingestion may result in nausea, vomiting and/or diarrhoea.

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Protection of first-aiders : When administering first aid, ensure that you are wearing the

appropriate personal protective equipment according to the

incident, injury and surroundings.

Immediate medical attention,

special treatment

: Treat symptomatically.

#### **SECTION 5. FIRE-FIGHTING MEASURES**

Suitable extinguishing media : Foam, water spray or fog. Dry chemical powder, carbon dio-

xide, sand or earth may be used for small fires only.

Unsuitable extinguishing

media

: Do not use water in a jet.

Specific hazards during fire-

fighting

: Hazardous combustion products may include:

A complex mixture of airborne solid and liquid particulates and

gases (smoke).

Carbon monoxide may be evolved if incomplete combustion

occurs.

Unidentified organic and inorganic compounds.

Specific extinguishing me-

thods

: Use extinguishing measures that are appropriate to local cir-

cumstances and the surroundingenvironment.

Special protective equipment

for firefighters

: Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. Self-Contained Breathing Apparatus must be worn when approaching a fire in

a confined space. Select fire fighter's clothing approved to relevant Standards (e.g. Europe: EN469).

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protec: Avoid contact with skin and eyes. tive equipment and emer-

gency procedures

Environmental precautions

: Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers.

Local authorities should be advised if significant spillages

cannot be contained.

Methods and materials for containment and cleaning up : Slippery when spilt. Avoid accidents, clean up immediately. Prevent from spreading by making a barrier with sand, earth

or other containment material.

Reclaim liquid directly or in an absorbent.

Soak up residue with an absorbent such as clay, sand or other

suitable material and dispose of properly.

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Additional advice : For guidance on selection of personal protective equipment

see Chapter 8 of this Safety Data Sheet.

For guidance on disposal of spilled material see Chapter 13 of

this Safety Data Sheet.

#### **SECTION 7. HANDLING AND STORAGE**

Technical measures : Use local exhaust ventilation if there is risk of inhalation of

vapours, mists or aerosols.

Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this

material.

Precautions for safe handling : Avoid prolonged or repeated contact with skin.

Avoid inhaling vapour and/or mists.

When handling product in drums, safety footwear should be worn and proper handling equipment should be used. Properly dispose of any contaminated rags or cleaning mate-

rials in order to prevent fires.

Avoidance of contact : Strong oxidising agents.

Product Transfer : This material has the potential to be a static accumulator.

Proper grounding and bonding procedures should be used

during all bulk transfer operations.

**Storage** 

Other data : Keep container tightly closed and in a cool, well-ventilated

place.

Use properly labeled and closable containers.

Store at ambient temperature.

Packaging material : Suitable material: For containers or container linings, use mild

steel or high density polyethylene.

Unsuitable material: PVC.

Container Advice : Polyethylene containers should not be exposed to high tem-

peratures because of possible risk of distortion.

#### SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

## Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Oil mist, mineral	Not Assigned	TWA ((inhal- able frac- tion))	5 mg/m3	US. ACGIH Threshold Limit Values
		(Mist)	5 mg/m3	OSHA_TRA

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## Biological occupational exposure limits

No biological limit allocated.

#### **Monitoring Methods**

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate.

Validated exposure measurement methods should be applied by a competent person and samples analysed by an accredited laboratory.

Examples of sources of recommended exposure measurement methods are given below or contact the supplier. Further national methods may be available.

National Institute of Occupational Safety and Health (NIOSH), USA: Manual of Analytical Methods http://www.cdc.gov/niosh/

Occupational Safety and Health Administration (OSHA), USA: Sampling and Analytical Methods http://www.osha.gov/

Health and Safety Executive (HSE), UK: Methods for the Determination of Hazardous Substances http://www.hse.gov.uk/

Institut für Arbeitsschutz Deutschen Gesetzlichen Unfallversicherung (IFA), Germany http://www.dguv.de/inhalt/index.jsp

L'Institut National de Recherche et de Securité, (INRS), France http://www.inrs.fr/accueil

#### **Engineering measures**

: The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include:

Adequate ventilation to control airborne concentrations.

Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.

#### General Information:

Define procedures for safe handling and maintenance of controls.

Educate and train workers in the hazards and control measures relevant to normal activities associated with this product. Ensure appropriate selection, testing and maintenance of equipment used to control exposure, e.g. personal protective equipment, local exhaust ventilation.

Drain down system prior to equipment break-in or mainten-

Retain drain downs in sealed storage pending disposal or subsequent recycle.

Always observe good personal hygiene measures, such as washing hands after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned.

Practice good housekeeping.

## Personal protective equipment

Respiratory protection

: No respiratory protection is ordinarily required undernormal conditions of use.

In accordance with good industrial hygiene practices, precau-

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tions should be taken to avoid breathing of material. If engineering controls do not maintain airborne concentrations to a level which is adequate to protect workerhealth, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter.

Select a filter suitable for the combination of organic gases and vapours [Type A/Type P boiling point >65°C (149°F)].

# Hand protection Remarks

Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection. PVC, neoprene or nitrile rubber gloves Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended. For continuous contact we recommend gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same, but recognize that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time maybe acceptable so long as appropriate maintenance and replacement regimes are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove material. Glove thickness should be typically greater than 0.35 mm depending on the glove make and model.

## Eye protection

: If material is handled such that it could be splashed into eyes, protective eyewear is recommended.

Skin and body protection

: Skin protection is not ordinarily required beyond standard work clothes.

It is good practice to wear chemical resistant gloves.

Protective measures

: Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

#### **Environmental exposure controls**

General advice

: Take appropriate measures to fulfill the requirements of relevant environmental protection legislation. Avoid contamination of the environment by following advice given in Chapter 6. If necessary, prevent undissolved material from being discharged to waste water. Waste water should be treated in a municipal or industrial waste water treatment plant before discharge to surface water.

Local guidelines on emission limits for volatile substances

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must be observed for the discharge of exhaust air containing

vapour.

## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : Liquid at room temperature.

Colour : amber

Odour : Slight hydrocarbon

Odour Threshold : Data not available

pH : Not applicable

pour point : -43 °C / -45 °FMethod: Unspecified

Initial boiling point and boiling

range

: > 280 °C / 536 °Festimated value(s)

Flash point : 228 °C / 442 °F

Method: Unspecified

Evaporation rate : Data not available

Flammability (solid, gas) : Data not available

Upper explosion limit : Typical 10 %(V)

Lower explosion limit : Typical 1 %(V)

Vapour pressure :  $< 0.5 \text{ Pa} (20 \,^{\circ}\text{C} / 68 \,^{\circ}\text{F})$ 

estimated value(s)

Relative vapour density : > 1estimated value(s)

Relative density :  $0.880 (15 \,^{\circ}\text{C} / 59 \,^{\circ}\text{F})$ 

Density : 880 kg/m3 (15.0 °C / 59.0 °F)

Method: Unspecified

Solubility(ies)

Water solubility : negligible

Solubility in other solvents : Data not available

Partition coefficient: n-

octanol/water

: Pow: > 6(based on information on similar products)

Auto-ignition temperature : :

320 °C / 608 °F

Viscosity

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Viscosity, dynamic : Data not available

Viscosity, kinematic : 69.05 mm2/s (40.0 °C / 104.0 °F)

Method: Unspecified

10.42 mm2/s (100 °C / 212 °F)

Method: Unspecified

Conductivity : This material is not expected to be a static accumulator.

Decomposition temperature : Data not available

#### **SECTION 10. STABILITY AND REACTIVITY**

Reactivity : The product does not pose any further reactivity hazards in

addition to those listed in the following sub-paragraph.

Chemical stability : Stable.

Possibility of hazardous reac-

ions

: Reacts with strong oxidising agents.

Conditions to avoid : Extremes of temperature and direct sunlight.

Incompatible materials : Strong oxidising agents.

Hazardous decomposition

products

: Hazardous decomposition products are not expected to form

during normal storage.

#### SECTION 11. TOXICOLOGICAL INFORMATION

Basis for assessment : Information given is based on data on the components and

the toxicology of similar products. Unless indicated otherwise, the data presented is representative of the product as a

whole, rather than for individual component(s).

## Information on likely routes of exposure

Skin and eye contact are the primary routes of exposure although exposure may occur following accidental ingestion.

#### **Acute toxicity**

**Product:** 

Acute oral toxicity : LD50 (rat): > 5,000 mg/kg

Remarks: Expected to be of low toxicity:

Acute inhalation toxicity : Remarks: Not considered to be an inhalation hazard under

normal conditions of use.

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

Remarks: Expected to be of low toxicity:

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#### Skin corrosion/irritation

#### **Product:**

Remarks: Expected to be slightly irritating., Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.

## Serious eye damage/eye irritation

#### **Product:**

Remarks: Expected to be slightly irritating.

## Respiratory or skin sensitisation

#### **Product:**

Remarks: Not expected to be a skin sensitiser.

#### Germ cell mutagenicity

## **Product:**

: Remarks: Not considered a mutagenic hazard.

## Carcinogenicity

#### **Product:**

Remarks: Not expected to be carcinogenic.

Remarks: Product contains mineral oils of types shown to be non-carcinogenic in animalskinpainting studies., Highly refined mineral oils are not classified as carcinogenic by the International Agency for Research on Cancer (IARC).

IARC No component of this product present at levels greater than or

equal to 0.1% is identified as probable, possible or confirmed

human carcinogen by IARC.

**ACGIH** No component of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential carcino-

gen by ACGIH.

OSHA No component of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential carcino-

gen by OSHA.

NTP No component of this product present at levels greater than or

equal to 0.1% is identified as a known or anticipated carcinogen

by NTP.

## Reproductive toxicity

## **Product:**

Remarks: Not expected to impair fertility., Not expected to be

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a developmental toxicant.

#### STOT - single exposure

#### Product:

Remarks: Not expected to be a hazard.

## STOT - repeated exposure

#### **Product:**

Remarks: Not expected to be a hazard.

## **Aspiration toxicity**

#### **Product:**

Not considered an aspiration hazard.

#### **Further information**

#### **Product:**

Remarks: Used oils may contain harmful impurities that have accumulated during use. The concentration of such impurities will depend on use and they may present risks to health and the environment on disposal., ALL used oil should be handled with caution and skin contact avoided as far as possible.

Remarks: Continuous contact with used engine oils has caused skin cancer in animal tests.

Remarks: Slightly irritating to respiratory system.

## **SECTION 12. ECOLOGICAL INFORMATION**

Basis for assessment : Ecotoxicological data have not been determined specifically

for this product.

Information given is based on a knowledge of the components

and the ecotoxicology of similar products.

Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).(LL/EL/IL50 expressed as the nominal amount of

product required to prepare aqueous test extract).

## **Ecotoxicity**

## **Product:**

Toxicity to fish (Acute toxic-

ity)

Remarks: Expected to be practically nontoxic:

LL/EL/IL50 > 100 mg/l

Toxicity to daphnia and other

aquatic invertebrates (Acute

toxicity)

Remarks: Expected to be practically nontoxic:

LL/EL/IL50 > 100 mg/l

Toxicity to algae (Acute toxic-

ity)

Remarks: Expected to be practically nontoxic:

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LL/EL/IL50 > 100 mg/l

Toxicity to fish (Chronic toxic-

ity)

: Remarks: Data not available

Toxicity to daphnia and other aquatic invertebrates (Chron-

ic toxicity)

: Remarks: Data not available

Toxicity to bacteria (Acute

toxicity)

: Remarks: Data not available

## Persistence and degradability

#### **Product:**

Biodegradability : Remarks: Expected to be not readily biodegradable.

> Major constituents are expected to be inherently biodegradable, but contains components that may persist in the environ-

ment.

## **Bioaccumulative potential**

#### **Product:**

Bioaccumulation : Remarks: Contains components with the potential to bioac-

cumulate.

## Mobility in soil

## **Product:**

Mobility Remarks: Liquid under most environmental conditions.

If it enters soil, it will adsorb to soil particles and will not be

mobile.

Remarks: Floats on water.

## Other adverse effects

no data available

## Product:

Additional ecological informa-

tion

: Product is a mixture of non-volatile components, which are not expected to be released to air in any significant quantities. Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential.

Poorly soluble mixture.

May cause physical fouling of aquatic organisms.

Mineral oil is not expected to cause any chronic effects to aquatic organisms at concentrations less than 1 mg/l.

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#### SECTION 13. DISPOSAL CONSIDERATIONS

**Disposal methods** 

Waste from residues : Waste product should not be allowed to contaminate soil or

ground water, or be disposed of into the environment. Waste, spills or used product is dangerous waste.

Disposal should be in accordance with applicable regional,

national, and local laws and regulations.

Local regulations may be more stringent than regional or na-

tional requirements and must be complied with.

Contaminated packaging : Dispose in accordance with prevailing regulations, preferably

to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand. Disposal should be in accordance with applicable regional,

national, and local laws and regulations.

#### **SECTION 14. TRANSPORT INFORMATION**

## **National Regulations**

## US Department of Transportation Classification (49 CFR Parts 171-180)

Not regulated as a dangerous good

## International Regulation

IATA-DGR

Not regulated as a dangerous good

**IMDG-Code** 

Not regulated as a dangerous good

## Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Pollution category : Not applicable
Ship type : Not applicable
Product name : Not applicable
Special precautions : Not applicable

Special precautions for user

Remarks : Special Precautions: Refer to Chapter 7, Handling & Storage,

for special precautions which a user needs to be aware of or

needs to comply with in connection with transport.

Additional Information : MARPOL Annex 1 rules apply for bulk shipments by sea.

#### **SECTION 15. REGULATORY INFORMATION**

OSHA Hazards : No OSHA Hazards

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## **EPCRA - Emergency Planning and Community Right-to-Know Act**

#### **CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ., Shell classifies this material as an "oil" under the CERCLA Petroleum Exclusion, therefore releases to the environment are not reportable under CERCLA.

## SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : No SARA Hazards

**SARA 302** : No chemicals in this material are subject to the reporting

requirements of SARA Title III, Section 302.

**SARA 313** : This material does not contain any chemical components with

> known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### **Clean Water Act**

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

California Prop 65 This product does not contain any chemicals known to State

of California to cause cancer, birth defects, or any other re-

productive harm.

The components of this product are reported in the following inventories:

**EINECS** : All components listed or polymer exempt.

**TSCA** : All components listed.

DSL : All components listed.

#### **SECTION 16. OTHER INFORMATION**

#### **Further information**

NFPA Rating (Health, Fire, Reac- 0, 1, 0

tivity)

A vertical bar (|) in the left margin indicates an amendment from the previous version.

Abbreviations and Acronyms : The standard abbreviations and acronyms used in this docu-

ment can be looked up in reference literature (e.g. scientific

dictionaries) and/or websites.

ACGIH = American Conference of Governmental Industrial

**Hvaienists** 

ADR = European Agreement concerning the International

Carriage of Dangerous Goods by Road

AICS = Australian Inventory of Chemical Substances ASTM = American Society for Testing and Materials

BEL = Biological exposure limits

BTEX = Benzene, Toluene, Ethylbenzene, Xylenes

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CAS = Chemical Abstracts Service

CEFIC = European Chemical Industry Council

CLP = Classification Packaging and Labelling

COC = Cleveland Open-Cup

DIN = Deutsches Institut für Normung

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

DSL = Canada Domestic Substance List

EC = European Commission

EC50 = Effective Concentration fifty

ECETOC = European Center on Ecotoxicology and Toxicolo-

gy Of Chemicals

ECHA = European Chemicals Agency

EINECS = The European Inventory of Existing Commercial

**Chemical Substances** 

EL50 = Effective Loading fifty

ENCS = Japanese Existing and New Chemical Substances

Inventory

EWC = European Waste Code

GHS = Globally Harmonised System of Classification and

Labelling of Chemicals

IARC = International Agency for Research on Cancer

IATA = International Air Transport Association

IC50 = Inhibitory Concentration fifty

IL50 = Inhibitory Level fifty

IMDG = International Maritime Dangerous Goods

INV = Chinese Chemicals Inventory

IP346 = Institute of Petroleum test method N° 346 for the determination of polycyclic aromatics DMSO-extractables

KECI = Korea Existing Chemicals Inventory

LC50 = Lethal Concentration fifty

LD50 = Lethal Dose fifty per cent.

LL/EL/IL = Lethal Loading/Effective Loading/Inhibitory loading

LL50 = Lethal Loading fifty

MARPOL = International Convention for the Prevention of

Pollution From Ships

NOEC/NOEL = No Observed Effect Concentration / No Observed Effect Level

OE\_HPV = Occupational Exposure - High Production Volume

PBT = Persistent, Bioaccumulative and Toxic

PICCS = Philippine Inventory of Chemicals and Chemical Substances

PNEC = Predicted No Effect Concentration

REACH = Registration Evaluation And Authorisation Of Chemicals

RID = Regulations Relating to International Carriage of Dangerous Goods by Rail

SKIN\_DES = Skin Designation

STEL = Short term exposure limit

TRA = Targeted Risk Assessment

TSCA = US Toxic Substances Control Act

TWA = Time-Weighted Average

vPvB = very Persistent and very Bioaccumulative

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

Issuing Date 19-Feb-2016 Revision Date 19-Feb-2016 Revision Number 1

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# 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier** 

Product Name BattNonSpillSams

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Lead Acid (Non-Spillable) Battery

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Name East Penn Mfg.

Supplier Address Deka Rd

Lyon Station

PA 19536 US

**Supplier Phone Number** Phone:610-682-6361

Fax:610-682-1650

Contact Phone610-682-6361

Supplier Email mgriffith@dekabatteries.com

Emergency telephone number

**Company Emergency Phone** 

610-682-6361

Number

## 2. HAZARDS IDENTIFICATION

#### Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). This product is an article which is a sealed battery and as such does not require an MSDS per the OSHA hazard communication standard unless ruptured. The hazards indicated are for a ruptured battery.

Acute toxicity - Oral Category 4



Acute toxicity - Inhalation (Vapors)	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 1A
Reproductive Toxicity	Category 1A
Specific target organ toxicity (repeated exposure)	Category 1

## GHS Label elements, including precautionary statements

**Emergency Overview** 

Signal word

**Danger** 

#### Hazard Statements

Harmful if swallowed Harmful if inhaled

Toxic if inhaled

Causes severe skin burns and eye damage

May cause cancer

May damage fertility or the unborn child

Causes damage to organs through prolonged or repeated exposure



. This product is an article which contains a chemical substance. Safety information is given for exposure to the article as sold. Intended use of the product should not result in exposure to the chemical substance. This is a battery. In case of rupture: the above hazards exist.

**Appearance** Colorless

Physical state Solid

**Odor** Odorless

## **Precautionary Statements - Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Do not breathe dust/fume/gas/mist/vapors/spray

## **Precautionary Statements - Response**

Immediately call a POISON CENTER or doctor/physician

Specific treatment (see supplemental first aid instructions on this label)

#### **Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician

## Skin

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse

#### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell Immediately call a POISON CENTER or doctor/physician

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Do NOT induce vomiting

## **Precautionary Statements - Storage**

Store locked up

Store in a well-ventilated place. Keep container tightly closed

## **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

Not applicable

#### **Unknown Toxicity**

0 % of the mixture consists of ingredient(s) of unknown toxicity

#### Other information

Very toxic to aquatic life with long lasting effects

## **Interactions with Other Chemicals**

Use of alcoholic beverages may enhance toxic effects.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

.

Chemical name	CAS No	Weight-%	Trade Secret
Lead	7439-92-1	60 - 100	*
Sulfuric acid	7664-93-9	10 - 30	*

<sup>\*</sup>The exact percentage (concentration) of composition has been withheld as a trade secret

## 4. FIRST AID MEASURES

#### First aid measures

**General Advice** First aid is upon rupture of sealed battery.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep

eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present

and easy to do. Continue rinsing. Seek immediate medical attention/advice.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Seek immediate medical attention/advice.

**Inhalation** Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical

attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel

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should) give oxygen. Delayed pulmonary edema may occur. Get medical attention

immediately if symptoms occur.

Ingestion Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water. Never give

anything by mouth to an unconscious person. Call a physician or poison control center

immediately.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. Wear personal protective clothing (see

section 8).

## Most important symptoms and effects, both acute and delayed

Most Important Symptoms and

Effects

Burning sensation. Coughing and/ or wheezing. Difficulty in breathing. Lead poisoning is characterized by a metallic taste in the mouth, loss of appetite indigestion, nausea, vomiting, constipation, sleep disturbances and overall weakness. Severe exposures can lead to shock, circulatory collapse, and death.

#### Indication of any immediate medical attention and special treatment needed

**Notes to Physician** Product is a corrosive material. Use of gastric lavage or emesis is contraindicated.

Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood

pressure may occur with moist rales, frothy sputum, and high pulse pressure.

## 5. FIRE-FIGHTING MEASURES

#### **Suitable Extinguishing Media**

Dry chemical. Carbon dioxide (CO2). Water spray.

## Unsuitable extinguishing media

CAUTION: Use of water spray when fighting fire may be inefficient.

## Specific hazards arising from the chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors.

Uniform Fire Code Toxic: Liquid

Corrosive: Acid-Liquid

**Explosion Data** 

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

## Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

## Personal precautions, protective equipment and emergency procedures

Personal precautions Attention! Corrosive material. Avoid contact with skin, eyes or clothing. Ensure adequate

ventilation. Use personal protective equipment as required. Evacuate personnel to safe

areas. Keep people away from and upwind of spill/leak.

Other Information Refer to protective measures listed in Sections 7 and 8.

**Environmental precautions** 

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Should not be released into the

environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment Absorb or cover with dry earth, sand or other non-combustible material and transfer to

containers.

**Methods for cleaning up**Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

## Precautions for safe handling

Handling In case of rupture: Handle in accordance with good industrial hygiene and safety practice.

Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash

before reuse.

Conditions for safe storage, including any incompatibilities

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from

moisture. Store locked up. Keep out of the reach of children. Store away from other

materials.

Incompatible Products Acids. Bases. Oxidizing agent.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## **Control parameters**

## **Exposure Guidelines**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Lead	TWA: 0.05 mg/m <sup>3</sup>	TWA: 50 μg/m³ TWA: 50 μg/m³	IDLH: 100 mg/m <sup>3</sup>
7439-92-1		Pb	TWA: 0.050 mg/m <sup>3</sup>
		Action Level: 30 µg/m³ Poison,	
		See 29 CFR 1910.1025 Action	
		Level: 30 µg/m³ Pb Poison, See	
		29 CFR 1910.1025	



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Sulfuric acid	TWA: 0.2 mg/m <sup>3</sup> thoracic fraction	TWA: 1 mg/m <sup>3</sup>	IDLH: 15 mg/m <sup>3</sup>
7664-93-9		(vacated) TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m³

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits NIOSH IDLH Immediately Dangerous to Life or Health

**Other Exposure Guidelines** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962

(11th Cir., 1992)

**Appropriate engineering controls** 

**Engineering Measures** Showers

> Eyewash stations Ventilation systems

Individual protection measures, such as personal protective equipment

Face protection shield. Eye/face protection

Skin and body protection Wear protective gloves and protective clothing. Long sleeved clothing. Chemical resistant

apron. Impervious gloves.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

> respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

> skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended.

Wash hands before breaks and immediately after handling the product. Take off

contaminated clothing and wash before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

## **Physical and Chemical Properties**

Physical state Colorless **Appearance** Odor Odorless

Color No information available **Odor Threshold** No information available

Property Values Remarks Method

Ha 2 None known None known Melting / freezing point No data available None known Boiling point / boiling range No data available None known No data available Flash Point No data available None known **Evaporation Rate** Flammability (solid, gas) No data available None known

Solid

Flammability Limit in Air

Upper flammability limit No data available No data available Lower flammability limit

Vapor pressure No data available None known Vapor density No data available None known **Specific Gravity** 1.27 None known

**Water Solubility** Immiscible in water None known Solubility in other solvents No data available None known Partition coefficient: n-octanol/water.7 None known

**Autoignition temperature** No data available None known

Decomposition temperatureNo data availableNone knownKinematic viscosityNo data availableNone knownDynamic viscosity26.7None known

**Explosive properties**No data available **Oxidizing properties**No data available

**Other Information** 

Softening Point
VOC Content (%)
Particle Size
No data available
No data available
No data available

**Particle Size Distribution** 

## 10. STABILITY AND REACTIVITY

#### Reactivity

No data available.

## **Chemical stability**

Stable under recommended storage conditions.

## **Possibility of Hazardous Reactions**

None under normal processing.

#### Conditions to avoid

Exposure to air or moisture over prolonged periods. Excessive heat.

#### Incompatible materials

Acids. Bases. Oxidizing agent.

## **Hazardous Decomposition Products**

None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

**Product Information** Product does not present an acute toxicity hazard based on known or supplied information.

In case of rupture:.

**Inhalation** Specific test data for the substance or mixture is not available. Toxic by inhalation.

Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may

cause coughing, choking, headache, dizziness, and weakness for several hours.

Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal. May cause irritation of

respiratory tract.

**Eye contact** Specific test data for the substance or mixture is not available. Causes burns. (based on

components). Corrosive to the eyes and may cause severe damage including blindness.

Causes serious eye damage. May cause irreversible damage to eyes.

**Skin contact** Specific test data for the substance or mixture is not available. Causes burns. (based on

components). Prolonged skin contact causes burns.

**Ingestion** Specific test data for the substance or mixture is not available. Harmful if swallowed.

Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways. Ingestion may cause irritation to mucous membranes. Ingestion may cause

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gastrointestinal irritation, nausea, vomiting and diarrhea.

#### **Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sulfuric acid 7664-93-9	= 2140 mg/kg (Rat)	-	= 510 mg/m³ (Rat) 2 h

#### Information on toxicological effects

Symptoms Erythema (skin redness). Burning. May cause blindness. Coughing and/ or wheezing.

Difficulty in breathing.

## Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.

Mutagenic Effects No information available.

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Lead 7439-92-1	А3	Group 2A	Reasonably Anticipated	Х
Sulfuric acid 7664-93-9	A2	Group 1	Known	Х

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity Contains a known or suspected reproductive toxin. Product is or contains a chemical which

is a known or suspected reproductive hazard.

Developmental Toxicity STOT - single exposure

Contains ingredients that have suspected developmental hazards.

No information available.

**STOT - repeated exposure**Causes damage to organs through prolonged or repeated exposure. Based on

classification criteria from the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200), this product has been determined to cause systemic target organ toxicity from

chronic or repeated exposure. (STOT RE).

Chronic Toxicity Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw

necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Effects from this product caused by acute exposure may cause permanent damage to target organs and/or may cause chronic conditions. Contains a known or suspected carcinogen. Possible risk of irreversible effects. Avoid repeated exposure. Prolonged exposure may cause chronic effects. May cause adverse effects on the bone marrow and blood-forming system. Lead compounds may be absorbed by ingestion, by inhalation and through the skin. Lead may damage

kidney function, the blood forming system and the reproductive system.

Target Organ Effects Blood. Central Nervous System (CNS). Eyes. Gastrointestinal tract (GI). Gingival Tissue.

Kidney. Respiratory system. Skin. Teeth. Systemic Toxicity. Reproductive System. May

damage the unborn child.

**Aspiration Hazard** No information available.

Numerical measures of toxicity Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)
637.00 mg/kg
ATEmix (inhalation-gas)
6,000.00 ppm
ATEmix (inhalation-dust/mist)
0.92 mg/l
ATEmix (inhalation-vapor)
15.00 ATEmix

## 12. ECOLOGICAL INFORMATION

#### **Ecotoxicity**

Very toxic to aquatic life with long lasting effects.

Chemical name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Lead 7439-92-1		96h LC50: = 0.44 mg/L (Cyprinus carpio) 96h LC50: = 1.17 mg/L (Oncorhynchus mykiss) 96h LC50: = 1.32 mg/L (Oncorhynchus mykiss)		48h EC50: = 600 μg/L
Sulfuric acid 7664-93-9		96h LC50: > 500 mg/L (Brachydanio rerio)		24h EC50: = 29 mg/L

## Persistence and Degradability

No information available.

## **Bioaccumulation**

No information available

## Other adverse effects

No information available.

(UL)

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## 13. DISPOSAL CONSIDERATIONS

## Waste treatment methods

Disposal methods This material, as supplied, is a hazardous waste according to federal regulations (40 CFR

261).

**Contaminated Packaging** Do not reuse empty containers.

US EPA Waste Number D002 D004 D008

## California Hazardous Waste Codes 792

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste
Lead	Toxic
7439-92-1	
Sulfuric acid	Toxic
7664-93-9	Corrosive

## 14. TRANSPORT INFORMATION

DOTNOT REGULATEDProper Shipping NameNON REGULATED

Hazard Class N/A

TDG Not regulated

MEX Not regulated

ICAO Not regulated

<u>IATA</u> Not regulated

Proper Shipping Name NON REGULATED

Hazard Class N/A

IMDG/IMO Not regulated

Hazard Class N/A

RID Not regulated

ADR Not regulated

ADN Not regulated

## 15. REGULATORY INFORMATION

## International Inventories

TSCA Complies

DSL All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List



## **US Federal Regulations**

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS No	Weight-%	SARA 313 - Threshold Values %
Lead - 7439-92-1	7439-92-1	60 - 100	0.1
Sulfuric acid - 7664-93-9	7664-93-9	10 - 30	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

## **CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Lead 7439-92-1		X	X	
Sulfuric acid 7664-93-9	1000 lb			Х

## CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	<b>Extremely Hazardous Substances</b>	RQ
		RQs	
Lead 7439-92-1	10 lb		RQ 10 lb final RQ RQ 4.54 kg final RQ
Sulfuric acid 7664-93-9	1000 lb	1000 lb	RQ 1000 lb final RQ RQ 454 kg final RQ

## **US State Regulations**

## **California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical name	California Proposition 65
Lead - 7439-92-1	Carcinogen
	Developmental
	Female Reproductive
	Male Reproductive
Sulfuric acid - 7664-93-9	Carcinogen
Arsenic - 7440-38-2 Carcinogen	

## U.S. State Right-to-Know Regulations

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Chemical name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Lead 7439-92-1	Х	X	X	Х	Х
Sulfuric acid 7664-93-9	Х	Х	Х	Х	Х
Antimony 7440-36-0	Х	Х	Х	Х	Х
Arsenic	X	X	X	Х	X



7440-38-2			

## International Regulations

#### Mexico

National occupational exposure limits

Component	Carcinogen Status	Exposure Limits
Lead 7439-92-1 ( 60 - 100 )	A3	Mexico: TWA= 0.15 mg/m <sup>3</sup>
Sulfuric acid 7664-93-9 ( 10 - 30 )	A2	Mexico: TWA 1 mg/m <sup>3</sup>

A2 - Suspected Human Carcinogen
A3 - Confirmed Animal Carcinogen

Mexico - Occupational Exposure Limits - Carcinogens

## Canada

**WHMIS Hazard Class** 

Non-controlled

## **16. OTHER INFORMATION**

NFPA Health Hazards 3 Flammability 0 Instability 0 Physical and Chemical Hazards -

HMIS Health Hazards 0 Flammability 0 Physical Hazard 0 Personal Protection

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Prepared By Product Stewardship

23 British American Blvd. Latham, NY 12110 1-800-572-6501 19-Feb-2016

**Issuing Date** 19-Feb-2016 **Revision Date** 19-Feb-2016

Revision Note No information available

#### **Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

## **End of Safety Data Sheet**

Issuing Date 19-Feb-2016 Revision Date 19-Feb-2016 Revision Number 1

The supplier identified below generated this SDS using the UL SDS template. UL did not test, certify, or approve the substance described in this SDS, and all information in this SDS was provided by the supplier or was reproduced from publically available regulatory data sources. UL makes no representations or warranties regarding the completeness or accuracy of the information in this SDS and disclaims all liability in connection with the use of this information or the substance described in this SDS. The layout, appearance and format of this SDS is © 2014 UL LLC. All rights reserved.

# 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier** 

Product Name BattNonSpillSams

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Lead Acid (Non-Spillable) Battery

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Name East Penn Mfg.

Supplier Address Deka Rd

Lyon Station

PA 19536 US

**Supplier Phone Number** Phone:610-682-6361

Fax:610-682-1650

Contact Phone610-682-6361

Supplier Email mgriffith@dekabatteries.com

Emergency telephone number

**Company Emergency Phone** 

610-682-6361

Number

## 2. HAZARDS IDENTIFICATION

#### Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). This product is an article which is a sealed battery and as such does not require an MSDS per the OSHA hazard communication standard unless ruptured. The hazards indicated are for a ruptured battery.

Acute toxicity - Oral Category 4



Acute toxicity - Inhalation (Vapors)	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 1A
Reproductive Toxicity	Category 1A
Specific target organ toxicity (repeated exposure)	Category 1

## GHS Label elements, including precautionary statements

**Emergency Overview** 

Signal word

**Danger** 

#### Hazard Statements

Harmful if swallowed Harmful if inhaled

Toxic if inhaled

Causes severe skin burns and eye damage

May cause cancer

May damage fertility or the unborn child

Causes damage to organs through prolonged or repeated exposure



. This product is an article which contains a chemical substance. Safety information is given for exposure to the article as sold. Intended use of the product should not result in exposure to the chemical substance. This is a battery. In case of rupture: the above hazards exist.

**Appearance** Colorless

Physical state Solid

**Odor** Odorless

## **Precautionary Statements - Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Do not breathe dust/fume/gas/mist/vapors/spray

## **Precautionary Statements - Response**

Immediately call a POISON CENTER or doctor/physician

Specific treatment (see supplemental first aid instructions on this label)

#### **Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician

## Skin

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse

#### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell Immediately call a POISON CENTER or doctor/physician

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Do NOT induce vomiting

## **Precautionary Statements - Storage**

Store locked up

Store in a well-ventilated place. Keep container tightly closed

## **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

Not applicable

#### **Unknown Toxicity**

0 % of the mixture consists of ingredient(s) of unknown toxicity

#### Other information

Very toxic to aquatic life with long lasting effects

## **Interactions with Other Chemicals**

Use of alcoholic beverages may enhance toxic effects.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

.

Chemical name	CAS No	Weight-%	Trade Secret
Lead	7439-92-1	60 - 100	*
Sulfuric acid	7664-93-9	10 - 30	*

<sup>\*</sup>The exact percentage (concentration) of composition has been withheld as a trade secret

## 4. FIRST AID MEASURES

#### First aid measures

**General Advice** First aid is upon rupture of sealed battery.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep

eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present

and easy to do. Continue rinsing. Seek immediate medical attention/advice.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Seek immediate medical attention/advice.

**Inhalation** Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical

attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel

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should) give oxygen. Delayed pulmonary edema may occur. Get medical attention

immediately if symptoms occur.

Ingestion Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water. Never give

anything by mouth to an unconscious person. Call a physician or poison control center

immediately.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. Wear personal protective clothing (see

section 8).

## Most important symptoms and effects, both acute and delayed

Most Important Symptoms and

Effects

Burning sensation. Coughing and/ or wheezing. Difficulty in breathing. Lead poisoning is characterized by a metallic taste in the mouth, loss of appetite indigestion, nausea, vomiting, constipation, sleep disturbances and overall weakness. Severe exposures can lead to shock, circulatory collapse, and death.

#### Indication of any immediate medical attention and special treatment needed

**Notes to Physician** Product is a corrosive material. Use of gastric lavage or emesis is contraindicated.

Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood

pressure may occur with moist rales, frothy sputum, and high pulse pressure.

## 5. FIRE-FIGHTING MEASURES

#### **Suitable Extinguishing Media**

Dry chemical. Carbon dioxide (CO2). Water spray.

## Unsuitable extinguishing media

CAUTION: Use of water spray when fighting fire may be inefficient.

## Specific hazards arising from the chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors.

Uniform Fire Code Toxic: Liquid

Corrosive: Acid-Liquid

**Explosion Data** 

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

## Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

## Personal precautions, protective equipment and emergency procedures

Personal precautions Attention! Corrosive material. Avoid contact with skin, eyes or clothing. Ensure adequate

ventilation. Use personal protective equipment as required. Evacuate personnel to safe

areas. Keep people away from and upwind of spill/leak.

Other Information Refer to protective measures listed in Sections 7 and 8.

**Environmental precautions** 

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Should not be released into the

environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment Absorb or cover with dry earth, sand or other non-combustible material and transfer to

containers.

**Methods for cleaning up**Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

## Precautions for safe handling

Handling In case of rupture: Handle in accordance with good industrial hygiene and safety practice.

Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash

before reuse.

Conditions for safe storage, including any incompatibilities

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from

moisture. Store locked up. Keep out of the reach of children. Store away from other

materials.

Incompatible Products Acids. Bases. Oxidizing agent.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## **Control parameters**

## **Exposure Guidelines**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Lead	TWA: 0.05 mg/m <sup>3</sup>	TWA: 50 μg/m³ TWA: 50 μg/m³	IDLH: 100 mg/m <sup>3</sup>
7439-92-1		Pb	TWA: 0.050 mg/m <sup>3</sup>
		Action Level: 30 µg/m³ Poison,	
		See 29 CFR 1910.1025 Action	
		Level: 30 µg/m³ Pb Poison, See	
		29 CFR 1910.1025	



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Sulfuric acid	TWA: 0.2 mg/m <sup>3</sup> thoracic fraction	TWA: 1 mg/m <sup>3</sup>	IDLH: 15 mg/m <sup>3</sup>
7664-93-9		(vacated) TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m³

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits NIOSH IDLH Immediately Dangerous to Life or Health

**Other Exposure Guidelines** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962

(11th Cir., 1992)

**Appropriate engineering controls** 

**Engineering Measures** Showers

> Eyewash stations Ventilation systems

Individual protection measures, such as personal protective equipment

Face protection shield. Eye/face protection

Skin and body protection Wear protective gloves and protective clothing. Long sleeved clothing. Chemical resistant

apron. Impervious gloves.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

> respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

> skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended.

Wash hands before breaks and immediately after handling the product. Take off

contaminated clothing and wash before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

## **Physical and Chemical Properties**

Physical state Colorless **Appearance** Odor Odorless

Color No information available **Odor Threshold** No information available

Property Values Remarks Method

Ha 2 None known None known Melting / freezing point No data available None known Boiling point / boiling range No data available None known No data available Flash Point No data available None known **Evaporation Rate** Flammability (solid, gas) No data available None known

Solid

Flammability Limit in Air Upper flammability limit No data available

Lower flammability limit Vapor pressure No data available None known Vapor density No data available None known

No data available

**Specific Gravity** 1.27

None known **Water Solubility** Immiscible in water None known Solubility in other solvents No data available None known

Partition coefficient: n-octanol/water.7

None known **Autoignition temperature** No data available None known

Decomposition temperatureNo data availableNone knownKinematic viscosityNo data availableNone knownDynamic viscosity26.7None known

**Explosive properties**No data available **Oxidizing properties**No data available

**Other Information** 

Softening Point
VOC Content (%)
Particle Size
No data available
No data available
No data available

**Particle Size Distribution** 

## 10. STABILITY AND REACTIVITY

#### Reactivity

No data available.

## **Chemical stability**

Stable under recommended storage conditions.

## **Possibility of Hazardous Reactions**

None under normal processing.

#### Conditions to avoid

Exposure to air or moisture over prolonged periods. Excessive heat.

#### Incompatible materials

Acids. Bases. Oxidizing agent.

## **Hazardous Decomposition Products**

None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

**Product Information** Product does not present an acute toxicity hazard based on known or supplied information.

In case of rupture:.

**Inhalation** Specific test data for the substance or mixture is not available. Toxic by inhalation.

Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may

cause coughing, choking, headache, dizziness, and weakness for several hours.

Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal. May cause irritation of

respiratory tract.

Eye contact Specific test data for the substance or mixture is not available. Causes burns. (based on

components). Corrosive to the eyes and may cause severe damage including blindness.

Causes serious eye damage. May cause irreversible damage to eyes.

**Skin contact** Specific test data for the substance or mixture is not available. Causes burns. (based on

components). Prolonged skin contact causes burns.

**Ingestion** Specific test data for the substance or mixture is not available. Harmful if swallowed.

Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways. Ingestion may cause irritation to mucous membranes. Ingestion may cause

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gastrointestinal irritation, nausea, vomiting and diarrhea.

#### **Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sulfuric acid 7664-93-9	= 2140 mg/kg (Rat)	-	= 510 mg/m³ (Rat) 2 h

#### Information on toxicological effects

Symptoms Erythema (skin redness). Burning. May cause blindness. Coughing and/ or wheezing.

Difficulty in breathing.

## Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.

Mutagenic Effects No information available.

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Lead 7439-92-1	А3	Group 2A	Reasonably Anticipated	Х
Sulfuric acid 7664-93-9	A2	Group 1	Known	Х

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity Contains a known or suspected reproductive toxin. Product is or contains a chemical which

is a known or suspected reproductive hazard.

Developmental Toxicity STOT - single exposure

Contains ingredients that have suspected developmental hazards.

No information available.

**STOT - repeated exposure**Causes damage to organs through prolonged or repeated exposure. Based on

classification criteria from the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200), this product has been determined to cause systemic target organ toxicity from

chronic or repeated exposure. (STOT RE).

Chronic Toxicity Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw

necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Effects from this product caused by acute exposure may cause permanent damage to target organs and/or may cause chronic conditions. Contains a known or suspected carcinogen. Possible risk of irreversible effects. Avoid repeated exposure. Prolonged exposure may cause chronic effects. May cause adverse effects on the bone marrow and blood-forming system. Lead compounds may be absorbed by ingestion, by inhalation and through the skin. Lead may damage

kidney function, the blood forming system and the reproductive system.

Target Organ Effects Blood. Central Nervous System (CNS). Eyes. Gastrointestinal tract (GI). Gingival Tissue.

Kidney. Respiratory system. Skin. Teeth. Systemic Toxicity. Reproductive System. May

damage the unborn child.

Aspiration Hazard No information available.

Numerical measures of toxicity Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)
637.00 mg/kg
ATEmix (inhalation-gas)
6,000.00 ppm
ATEmix (inhalation-dust/mist)
0.92 mg/l
ATEmix (inhalation-vapor)
15.00 ATEmix

## 12. ECOLOGICAL INFORMATION

#### **Ecotoxicity**

Very toxic to aquatic life with long lasting effects.

Chemical name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Lead		96h LC50: = 0.44 mg/L		48h EC50: = 600 μg/L
7439-92-1		(Cyprinus carpio) 96h LC50:		
		= 1.17 mg/L (Oncorhynchus		
		mykiss) 96h LC50: = 1.32		
		mg/L (Oncorhynchus		
		mykiss)		
Sulfuric acid		96h LC50: > 500 mg/L	_	24h EC50: = 29 mg/L
7664-93-9		(Brachydanio rerio)		1

## Persistence and Degradability

No information available.

## **Bioaccumulation**

No information available

## Other adverse effects

No information available.

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# 13. DISPOSAL CONSIDERATIONS

## Waste treatment methods

Disposal methods This material, as supplied, is a hazardous waste according to federal regulations (40 CFR

261).

Contaminated Packaging Do not reuse empty containers.

US EPA Waste Number D002 D004 D008

## California Hazardous Waste Codes 792

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste
Lead	Toxic
7439-92-1	
Sulfuric acid	Toxic
7664-93-9	Corrosive

# 14. TRANSPORT INFORMATION

DOTNOT REGULATEDProper Shipping NameNON REGULATED

Hazard Class N/A

TDG Not regulated

MEX Not regulated

ICAO Not regulated

IATA Not regulated

Proper Shipping Name NON REGULATED

Hazard Class N/A

IMDG/IMO Not regulated

Hazard Class N/A

RID Not regulated

ADR Not regulated

ADN Not regulated

# 15. REGULATORY INFORMATION

# International Inventories

TSCA Complies

DSL All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List



# **US Federal Regulations**

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS No	Weight-%	SARA 313 - Threshold Values %
Lead - 7439-92-1	7439-92-1	60 - 100	0.1
Sulfuric acid - 7664-93-9	7664-93-9	10 - 30	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

# **CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Lead 7439-92-1		X	X	
Sulfuric acid 7664-93-9	1000 lb			Х

# CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	<b>Extremely Hazardous Substances</b>	RQ
		RQs	
Lead 7439-92-1	10 lb		RQ 10 lb final RQ RQ 4.54 kg final RQ
Sulfuric acid 7664-93-9	1000 lb	1000 lb	RQ 1000 lb final RQ RQ 454 kg final RQ

# **US State Regulations**

# **California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical name	California Proposition 65
Lead - 7439-92-1	Carcinogen
	Developmental
	Female Reproductive
	Male Reproductive
Sulfuric acid - 7664-93-9	Carcinogen
Arsenic - 7440-38-2	Carcinogen

# U.S. State Right-to-Know Regulations

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Chemical name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Lead 7439-92-1	Х	X	X	Х	Х
Sulfuric acid 7664-93-9	Х	Х	Х	Х	Х
Antimony 7440-36-0	Х	Х	Х	Х	Х
Arsenic	X	X	X	X	X



7440-38-2			

# International Regulations

#### Mexico

National occupational exposure limits

Component	Carcinogen Status	Exposure Limits
Lead 7439-92-1 ( 60 - 100 )	А3	Mexico: TWA= 0.15 mg/m <sup>3</sup>
Sulfuric acid 7664-93-9 ( 10 - 30 )	A2	Mexico: TWA 1 mg/m <sup>3</sup>

A2 - Suspected Human Carcinogen A3 - Confirmed Animal Carcinogen

Mexico - Occupational Exposure Limits - Carcinogens

#### Canada

**WHMIS Hazard Class** 

Non-controlled

# 16. OTHER INFORMATION

NFPA Health Hazards 3 Flammability 0 Instability 0 Physical and

HMIS Health Hazards 0 Flammability 0 Physical Hazard 0 Personal Protection

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Prepared By Product Stewardship

23 British American Blvd. Latham, NY 12110 1-800-572-6501

**Issuing Date** 19-Feb-2016 **Revision Date** 19-Feb-2016

Revision Note No information available

#### **Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

# **End of Safety Data Sheet**



# SAFETY DATA SHEET

Issuing Date 19-Feb-2016 Revision Date 19-Feb-2016 Revision Number 1



The supplier identified below generated this SDS using the UL SDS template. UL did not test, certify, or approve the substance described in this SDS, and all information in this SDS was provided by the supplier or was reproduced from publically available regulatory data sources. UL makes no representations or warranties regarding the completeness or accuracy of the information in this SDS and disclaims all liability in connection with the use of this information or the substance described in this SDS. The layout, appearance and format of this SDS is © 2014 UL LLC. All rights reserved.

# 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier** 

Product Name BattNonSpillSams

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Lead Acid (Non-Spillable) Battery

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Name East Penn Mfg.

Supplier Address Deka Rd

Lyon Station

PA 19536 US

Supplier Phone Number Phone:610-682-6361

Fax:610-682-1650

Contact Phone610-682-6361

Supplier Email mgriffith@dekabatteries.com

Emergency telephone number

**Company Emergency Phone** 

610-682-6361

Number .

# 2. HAZARDS IDENTIFICATION

#### Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). This product is an article which is a sealed battery and as such does not require an MSDS per the OSHA hazard communication standard unless ruptured. The hazards indicated are for a ruptured battery.

Acute toxicity - Oral Category 4



Acute toxicity - Inhalation (Vapors)	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 1A
Reproductive Toxicity	Category 1A
Specific target organ toxicity (repeated exposure)	Category 1

# GHS Label elements, including precautionary statements

**Emergency Overview** 

Signal word

**Danger** 

#### Hazard Statements

Harmful if swallowed Harmful if inhaled

Toxic if inhaled

Causes severe skin burns and eye damage

May cause cancer

May damage fertility or the unborn child

Causes damage to organs through prolonged or repeated exposure



. This product is an article which contains a chemical substance. Safety information is given for exposure to the article as sold. Intended use of the product should not result in exposure to the chemical substance. This is a battery. In case of rupture: the above hazards exist.

**Appearance** Colorless

Physical state Solid

**Odor** Odorless

# **Precautionary Statements - Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Do not breathe dust/fume/gas/mist/vapors/spray

## **Precautionary Statements - Response**

Immediately call a POISON CENTER or doctor/physician

Specific treatment (see supplemental first aid instructions on this label)

#### **Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician

## Skin

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse

#### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell Immediately call a POISON CENTER or doctor/physician

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Do NOT induce vomiting

## **Precautionary Statements - Storage**

Store locked up

Store in a well-ventilated place. Keep container tightly closed

## **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

Not applicable

#### **Unknown Toxicity**

0 % of the mixture consists of ingredient(s) of unknown toxicity

#### Other information

Very toxic to aquatic life with long lasting effects

## **Interactions with Other Chemicals**

Use of alcoholic beverages may enhance toxic effects.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

.

Chemical name	CAS No	Weight-%	Trade Secret
Lead	7439-92-1	60 - 100	*
Sulfuric acid	7664-93-9	10 - 30	*

<sup>\*</sup>The exact percentage (concentration) of composition has been withheld as a trade secret

# 4. FIRST AID MEASURES

#### First aid measures

**General Advice** First aid is upon rupture of sealed battery.

**Eye contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep

eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present

and easy to do. Continue rinsing. Seek immediate medical attention/advice.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Seek immediate medical attention/advice.

**Inhalation** Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical

attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel

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should) give oxygen. Delayed pulmonary edema may occur. Get medical attention

immediately if symptoms occur.

Ingestion Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water. Never give

anything by mouth to an unconscious person. Call a physician or poison control center

immediately.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. Wear personal protective clothing (see

section 8).

## Most important symptoms and effects, both acute and delayed

Most Important Symptoms and

Effects

Burning sensation. Coughing and/ or wheezing. Difficulty in breathing. Lead poisoning is characterized by a metallic taste in the mouth, loss of appetite indigestion, nausea, vomiting, constipation, sleep disturbances and overall weakness. Severe exposures can lead to shock, circulatory collapse, and death.

#### Indication of any immediate medical attention and special treatment needed

**Notes to Physician** Product is a corrosive material. Use of gastric lavage or emesis is contraindicated.

Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood

pressure may occur with moist rales, frothy sputum, and high pulse pressure.

## 5. FIRE-FIGHTING MEASURES

### **Suitable Extinguishing Media**

Dry chemical. Carbon dioxide (CO2). Water spray.

## Unsuitable extinguishing media

CAUTION: Use of water spray when fighting fire may be inefficient.

# Specific hazards arising from the chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors.

Uniform Fire Code Toxic: Liquid

Corrosive: Acid-Liquid

**Explosion Data** 

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

# Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

# 6. ACCIDENTAL RELEASE MEASURES

# Personal precautions, protective equipment and emergency procedures

Personal precautions Attention! Corrosive material. Avoid contact with skin, eyes or clothing. Ensure adequate

ventilation. Use personal protective equipment as required. Evacuate personnel to safe

areas. Keep people away from and upwind of spill/leak.

Other Information Refer to protective measures listed in Sections 7 and 8.

**Environmental precautions** 

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Should not be released into the

environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment Absorb or cover with dry earth, sand or other non-combustible material and transfer to

containers.

**Methods for cleaning up**Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

# 7. HANDLING AND STORAGE

## Precautions for safe handling

Handling In case of rupture: Handle in accordance with good industrial hygiene and safety practice.

Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash

before reuse.

Conditions for safe storage, including any incompatibilities

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from

moisture. Store locked up. Keep out of the reach of children. Store away from other

materials.

Incompatible Products Acids. Bases. Oxidizing agent.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

# **Control parameters**

# **Exposure Guidelines**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Lead	TWA: 0.05 mg/m <sup>3</sup>	TWA: 50 μg/m³ TWA: 50 μg/m³	IDLH: 100 mg/m <sup>3</sup>
7439-92-1		Pb	TWA: 0.050 mg/m <sup>3</sup>
		Action Level: 30 µg/m³ Poison,	
		See 29 CFR 1910.1025 Action	
		Level: 30 µg/m³ Pb Poison, See	
		29 CFR 1910.1025	



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Sulfuric acid	TWA: 0.2 mg/m <sup>3</sup> thoracic fraction	TWA: 1 mg/m <sup>3</sup>	IDLH: 15 mg/m <sup>3</sup>
7664-93-9		(vacated) TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m³

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits NIOSH IDLH Immediately Dangerous to Life or Health

**Other Exposure Guidelines** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962

(11th Cir., 1992)

**Appropriate engineering controls** 

**Engineering Measures** Showers

> Eyewash stations Ventilation systems

Individual protection measures, such as personal protective equipment

Face protection shield. Eye/face protection

Skin and body protection Wear protective gloves and protective clothing. Long sleeved clothing. Chemical resistant

apron. Impervious gloves.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

> respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

> skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended.

Wash hands before breaks and immediately after handling the product. Take off

contaminated clothing and wash before reuse.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

## **Physical and Chemical Properties**

Physical state Colorless **Appearance** Odor Odorless

Color No information available **Odor Threshold** No information available

Property Values Remarks Method

Ha 2 None known None known Melting / freezing point No data available None known Boiling point / boiling range No data available None known No data available Flash Point No data available None known **Evaporation Rate** Flammability (solid, gas) No data available None known

Solid

Flammability Limit in Air

Upper flammability limit No data available No data available Lower flammability limit

Vapor pressure No data available None known Vapor density No data available None known **Specific Gravity** 1.27 None known

**Water Solubility** Immiscible in water None known Solubility in other solvents No data available None known Partition coefficient: n-octanol/water.7 None known

**Autoignition temperature** No data available None known

Decomposition temperatureNo data availableNone knownKinematic viscosityNo data availableNone knownDynamic viscosity26.7None known

**Explosive properties**No data available **Oxidizing properties**No data available

**Other Information** 

Softening Point
VOC Content (%)
Particle Size
No data available
No data available
No data available

**Particle Size Distribution** 

# 10. STABILITY AND REACTIVITY

#### Reactivity

No data available.

## **Chemical stability**

Stable under recommended storage conditions.

## **Possibility of Hazardous Reactions**

None under normal processing.

#### Conditions to avoid

Exposure to air or moisture over prolonged periods. Excessive heat.

#### Incompatible materials

Acids. Bases. Oxidizing agent.

## **Hazardous Decomposition Products**

None known based on information supplied.

# 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

**Product Information** Product does not present an acute toxicity hazard based on known or supplied information.

In case of rupture:.

**Inhalation** Specific test data for the substance or mixture is not available. Toxic by inhalation.

Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may

cause coughing, choking, headache, dizziness, and weakness for several hours.

Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal. May cause irritation of

respiratory tract.

**Eye contact** Specific test data for the substance or mixture is not available. Causes burns. (based on

components). Corrosive to the eyes and may cause severe damage including blindness.

Causes serious eye damage. May cause irreversible damage to eyes.

**Skin contact** Specific test data for the substance or mixture is not available. Causes burns. (based on

components). Prolonged skin contact causes burns.

**Ingestion** Specific test data for the substance or mixture is not available. Harmful if swallowed.

Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways. Ingestion may cause irritation to mucous membranes. Ingestion may cause

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gastrointestinal irritation, nausea, vomiting and diarrhea.

#### **Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sulfuric acid 7664-93-9	= 2140 mg/kg (Rat)	-	= 510 mg/m³ (Rat) 2 h

#### Information on toxicological effects

Symptoms Erythema (skin redness). Burning. May cause blindness. Coughing and/ or wheezing.

Difficulty in breathing.

## Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.

Mutagenic Effects No information available.

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Lead 7439-92-1	А3	Group 2A	Reasonably Anticipated	Х
Sulfuric acid 7664-93-9	A2	Group 1	Known	Х

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity Contains a known or suspected reproductive toxin. Product is or contains a chemical which

is a known or suspected reproductive hazard.

Developmental Toxicity STOT - single exposure

Contains ingredients that have suspected developmental hazards.

No information available.

**STOT - repeated exposure**Causes damage to organs through prolonged or repeated exposure. Based on

classification criteria from the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200), this product has been determined to cause systemic target organ toxicity from

chronic or repeated exposure. (STOT RE).

Chronic Toxicity Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw

necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Effects from this product caused by acute exposure may cause permanent damage to target organs and/or may cause chronic conditions. Contains a known or suspected carcinogen. Possible risk of irreversible effects. Avoid repeated exposure. Prolonged exposure may cause chronic effects. May cause adverse effects on the bone marrow and blood-forming system. Lead compounds may be absorbed by ingestion, by inhalation and through the skin. Lead may damage

kidney function, the blood forming system and the reproductive system.

Target Organ Effects Blood. Central Nervous System (CNS). Eyes. Gastrointestinal tract (GI). Gingival Tissue.

Kidney. Respiratory system. Skin. Teeth. Systemic Toxicity. Reproductive System. May

damage the unborn child.

Aspiration Hazard No information available.

Numerical measures of toxicity Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)
637.00 mg/kg
ATEmix (inhalation-gas)
6,000.00 ppm
ATEmix (inhalation-dust/mist)
0.92 mg/l
ATEmix (inhalation-vapor)
15.00 ATEmix

# 12. ECOLOGICAL INFORMATION

#### **Ecotoxicity**

Very toxic to aquatic life with long lasting effects.

Chemical name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Lead 7439-92-1		96h LC50: = 0.44 mg/L (Cyprinus carpio) 96h LC50: = 1.17 mg/L (Oncorhynchus mykiss) 96h LC50: = 1.32 mg/L (Oncorhynchus mykiss)		48h EC50: = 600 μg/L
Sulfuric acid 7664-93-9		96h LC50: > 500 mg/L (Brachydanio rerio)		24h EC50: = 29 mg/L

# Persistence and Degradability

No information available.

## **Bioaccumulation**

No information available

# Other adverse effects

No information available.

(UL)

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# 13. DISPOSAL CONSIDERATIONS

## Waste treatment methods

Disposal methods This material, as supplied, is a hazardous waste according to federal regulations (40 CFR

261).

**Contaminated Packaging** Do not reuse empty containers.

US EPA Waste Number D002 D004 D008

## California Hazardous Waste Codes 792

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste
Lead	Toxic
7439-92-1	
Sulfuric acid	Toxic
7664-93-9	Corrosive

# 14. TRANSPORT INFORMATION

DOTNOT REGULATEDProper Shipping NameNON REGULATED

Hazard Class N/A

TDG Not regulated

MEX Not regulated

ICAO Not regulated

<u>IATA</u> Not regulated

Proper Shipping Name NON REGULATED

Hazard Class N/A

IMDG/IMO Not regulated

Hazard Class N/A

RID Not regulated

ADR Not regulated

ADN Not regulated

# 15. REGULATORY INFORMATION

# International Inventories

TSCA Complies

DSL All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List



# **US Federal Regulations**

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS No	Weight-%	SARA 313 - Threshold Values %
Lead - 7439-92-1	7439-92-1	60 - 100	0.1
Sulfuric acid - 7664-93-9	7664-93-9	10 - 30	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

# **CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Lead 7439-92-1		X	X	
Sulfuric acid 7664-93-9	1000 lb			Х

# CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	<b>Extremely Hazardous Substances</b>	RQ
		RQs	
Lead 7439-92-1	10 lb		RQ 10 lb final RQ RQ 4.54 kg final RQ
Sulfuric acid 7664-93-9	1000 lb	1000 lb	RQ 1000 lb final RQ RQ 454 kg final RQ

# **US State Regulations**

# **California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical name	California Proposition 65
Lead - 7439-92-1	Carcinogen
	Developmental
	Female Reproductive
	Male Reproductive
Sulfuric acid - 7664-93-9	Carcinogen
Arsenic - 7440-38-2	Carcinogen

# U.S. State Right-to-Know Regulations

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Chemical name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Lead 7439-92-1	Х	X	X	Х	Х
Sulfuric acid 7664-93-9	Х	Х	Х	Х	Х
Antimony 7440-36-0	Х	Х	Х	Х	Х
Arsenic	X	X	X	X	X



7440-38-2			

# International Regulations

#### Mexico

National occupational exposure limits

Component	Carcinogen Status	Exposure Limits
Lead 7439-92-1 ( 60 - 100 )	A3	Mexico: TWA= 0.15 mg/m <sup>3</sup>
Sulfuric acid 7664-93-9 ( 10 - 30 )	A2	Mexico: TWA 1 mg/m <sup>3</sup>

A2 - Suspected Human Carcinogen
A3 - Confirmed Animal Carcinogen

Mexico - Occupational Exposure Limits - Carcinogens

## Canada

**WHMIS Hazard Class** 

Non-controlled

# **16. OTHER INFORMATION**

NFPA Health Hazards 3 Flammability 0 Instability 0 Physical and Chemical Hazards -

HMIS Health Hazards 0 Flammability 0 Physical Hazard 0 Personal Protection

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Prepared By Product Stewardship

23 British American Blvd. Latham, NY 12110 1-800-572-6501 19-Feb-2016

**Issuing Date** 19-Feb-2016 **Revision Date** 19-Feb-2016

Revision Note No information available

#### **Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

# **End of Safety Data Sheet**

# SAFETY DATA SHEET

Issuing Date 19-Feb-2016 Revision Date 19-Feb-2016 Revision Number 1

The supplier identified below generated this SDS using the UL SDS template. UL did not test, certify, or approve the substance described in this SDS, and all information in this SDS was provided by the supplier or was reproduced from publically available regulatory data sources. UL makes no representations or warranties regarding the completeness or accuracy of the information in this SDS and disclaims all liability in connection with the use of this information or the substance described in this SDS. The layout, appearance and format of this SDS is © 2014 UL LLC. All rights reserved.

# 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier** 

Product Name BattNonSpillSams

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Lead Acid (Non-Spillable) Battery

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Name East Penn Mfg.

Supplier Address Deka Rd

Lyon Station

PA 19536 US

**Supplier Phone Number** Phone:610-682-6361

Fax:610-682-1650

Contact Phone610-682-6361

Supplier Email mgriffith@dekabatteries.com

Emergency telephone number

**Company Emergency Phone** 

610-682-6361

Number

# 2. HAZARDS IDENTIFICATION

#### Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). This product is an article which is a sealed battery and as such does not require an MSDS per the OSHA hazard communication standard unless ruptured. The hazards indicated are for a ruptured battery.

Acute toxicity - Oral Category 4



Acute toxicity - Inhalation (Vapors)	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 1A
Reproductive Toxicity	Category 1A
Specific target organ toxicity (repeated exposure)	Category 1

# GHS Label elements, including precautionary statements

**Emergency Overview** 

Signal word

**Danger** 

#### Hazard Statements

Harmful if swallowed Harmful if inhaled

Toxic if inhaled

Causes severe skin burns and eye damage

May cause cancer

May damage fertility or the unborn child

Causes damage to organs through prolonged or repeated exposure



. This product is an article which contains a chemical substance. Safety information is given for exposure to the article as sold. Intended use of the product should not result in exposure to the chemical substance. This is a battery. In case of rupture: the above hazards exist.

**Appearance** Colorless

Physical state Solid

**Odor** Odorless

# **Precautionary Statements - Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Do not breathe dust/fume/gas/mist/vapors/spray

## **Precautionary Statements - Response**

Immediately call a POISON CENTER or doctor/physician

Specific treatment (see supplemental first aid instructions on this label)

#### **Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician

## Skin

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse

#### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell Immediately call a POISON CENTER or doctor/physician

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Do NOT induce vomiting

## **Precautionary Statements - Storage**

Store locked up

Store in a well-ventilated place. Keep container tightly closed

## **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

Not applicable

#### **Unknown Toxicity**

0 % of the mixture consists of ingredient(s) of unknown toxicity

#### Other information

Very toxic to aquatic life with long lasting effects

## **Interactions with Other Chemicals**

Use of alcoholic beverages may enhance toxic effects.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

.

Chemical name	CAS No	Weight-%	Trade Secret
Lead	7439-92-1	60 - 100	*
Sulfuric acid	7664-93-9	10 - 30	*

<sup>\*</sup>The exact percentage (concentration) of composition has been withheld as a trade secret

# 4. FIRST AID MEASURES

#### First aid measures

**General Advice** First aid is upon rupture of sealed battery.

**Eye contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep

eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present

and easy to do. Continue rinsing. Seek immediate medical attention/advice.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Seek immediate medical attention/advice.

**Inhalation** Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical

attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel

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should) give oxygen. Delayed pulmonary edema may occur. Get medical attention

immediately if symptoms occur.

Ingestion Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water. Never give

anything by mouth to an unconscious person. Call a physician or poison control center

immediately.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. Wear personal protective clothing (see

section 8).

## Most important symptoms and effects, both acute and delayed

Most Important Symptoms and

Effects

Burning sensation. Coughing and/ or wheezing. Difficulty in breathing. Lead poisoning is characterized by a metallic taste in the mouth, loss of appetite indigestion, nausea, vomiting, constipation, sleep disturbances and overall weakness. Severe exposures can lead to shock, circulatory collapse, and death.

#### Indication of any immediate medical attention and special treatment needed

**Notes to Physician** Product is a corrosive material. Use of gastric lavage or emesis is contraindicated.

Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood

pressure may occur with moist rales, frothy sputum, and high pulse pressure.

## 5. FIRE-FIGHTING MEASURES

### **Suitable Extinguishing Media**

Dry chemical. Carbon dioxide (CO2). Water spray.

## Unsuitable extinguishing media

CAUTION: Use of water spray when fighting fire may be inefficient.

# Specific hazards arising from the chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors.

Uniform Fire Code Toxic: Liquid

Corrosive: Acid-Liquid

**Explosion Data** 

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

# Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

# 6. ACCIDENTAL RELEASE MEASURES

# Personal precautions, protective equipment and emergency procedures

Personal precautions Attention! Corrosive material. Avoid contact with skin, eyes or clothing. Ensure adequate

ventilation. Use personal protective equipment as required. Evacuate personnel to safe

areas. Keep people away from and upwind of spill/leak.

Other Information Refer to protective measures listed in Sections 7 and 8.

**Environmental precautions** 

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Should not be released into the

environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment Absorb or cover with dry earth, sand or other non-combustible material and transfer to

containers.

**Methods for cleaning up**Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

# 7. HANDLING AND STORAGE

## Precautions for safe handling

Handling In case of rupture: Handle in accordance with good industrial hygiene and safety practice.

Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash

before reuse.

Conditions for safe storage, including any incompatibilities

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from

moisture. Store locked up. Keep out of the reach of children. Store away from other

materials.

Incompatible Products Acids. Bases. Oxidizing agent.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

# **Control parameters**

# **Exposure Guidelines**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Lead	TWA: 0.05 mg/m <sup>3</sup>	TWA: 50 μg/m³ TWA: 50 μg/m³	IDLH: 100 mg/m <sup>3</sup>
7439-92-1		Pb	TWA: 0.050 mg/m <sup>3</sup>
		Action Level: 30 µg/m³ Poison,	
		See 29 CFR 1910.1025 Action	
		Level: 30 µg/m³ Pb Poison, See	
		29 CFR 1910.1025	



Revision Date 19-Feb-2016 1043641 - BattNonSpillSams

Sulfuric acid	TWA: 0.2 mg/m <sup>3</sup> thoracic fraction	TWA: 1 mg/m <sup>3</sup>	IDLH: 15 mg/m <sup>3</sup>
7664-93-9		(vacated) TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m³

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits NIOSH IDLH Immediately Dangerous to Life or Health

**Other Exposure Guidelines** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962

(11th Cir., 1992)

**Appropriate engineering controls** 

**Engineering Measures** Showers

> Eyewash stations Ventilation systems

Individual protection measures, such as personal protective equipment

Face protection shield. Eye/face protection

Skin and body protection Wear protective gloves and protective clothing. Long sleeved clothing. Chemical resistant

apron. Impervious gloves.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

> respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

> skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended.

Wash hands before breaks and immediately after handling the product. Take off

contaminated clothing and wash before reuse.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

## **Physical and Chemical Properties**

Physical state Colorless **Appearance** Odor Odorless

Color No information available **Odor Threshold** No information available

Property Values Remarks Method

Ha 2 None known None known Melting / freezing point No data available None known Boiling point / boiling range No data available None known No data available Flash Point No data available None known **Evaporation Rate** Flammability (solid, gas) No data available None known

Solid

Flammability Limit in Air

Upper flammability limit No data available No data available Lower flammability limit

Vapor pressure No data available None known Vapor density No data available None known **Specific Gravity** 1.27 None known

**Water Solubility** Immiscible in water None known Solubility in other solvents No data available None known Partition coefficient: n-octanol/water.7 None known

**Autoignition temperature** No data available None known

Decomposition temperatureNo data availableNone knownKinematic viscosityNo data availableNone knownDynamic viscosity26.7None known

**Explosive properties**No data available **Oxidizing properties**No data available

**Other Information** 

Softening Point
VOC Content (%)
Particle Size
No data available
No data available
No data available

**Particle Size Distribution** 

# 10. STABILITY AND REACTIVITY

#### Reactivity

No data available.

## **Chemical stability**

Stable under recommended storage conditions.

## **Possibility of Hazardous Reactions**

None under normal processing.

#### Conditions to avoid

Exposure to air or moisture over prolonged periods. Excessive heat.

#### Incompatible materials

Acids. Bases. Oxidizing agent.

## **Hazardous Decomposition Products**

None known based on information supplied.

# 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

**Product Information** Product does not present an acute toxicity hazard based on known or supplied information.

In case of rupture:.

**Inhalation** Specific test data for the substance or mixture is not available. Toxic by inhalation.

Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may

cause coughing, choking, headache, dizziness, and weakness for several hours.

Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal. May cause irritation of

respiratory tract.

**Eye contact** Specific test data for the substance or mixture is not available. Causes burns. (based on

components). Corrosive to the eyes and may cause severe damage including blindness.

Causes serious eye damage. May cause irreversible damage to eyes.

**Skin contact** Specific test data for the substance or mixture is not available. Causes burns. (based on

components). Prolonged skin contact causes burns.

**Ingestion** Specific test data for the substance or mixture is not available. Harmful if swallowed.

Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways. Ingestion may cause irritation to mucous membranes. Ingestion may cause

\_\_\_\_\_

gastrointestinal irritation, nausea, vomiting and diarrhea.

#### **Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sulfuric acid 7664-93-9	= 2140 mg/kg (Rat)	-	= 510 mg/m³ (Rat) 2 h

#### Information on toxicological effects

Symptoms Erythema (skin redness). Burning. May cause blindness. Coughing and/ or wheezing.

Difficulty in breathing.

## Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.

Mutagenic Effects No information available.

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Lead 7439-92-1	А3	Group 2A	Reasonably Anticipated	Х
Sulfuric acid 7664-93-9	A2	Group 1	Known	Х

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity Contains a known or suspected reproductive toxin. Product is or contains a chemical which

is a known or suspected reproductive hazard.

Developmental Toxicity STOT - single exposure

Contains ingredients that have suspected developmental hazards.

No information available.

**STOT - repeated exposure**Causes damage to organs through prolonged or repeated exposure. Based on

classification criteria from the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200), this product has been determined to cause systemic target organ toxicity from

chronic or repeated exposure. (STOT RE).

Chronic Toxicity Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw

necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Effects from this product caused by acute exposure may cause permanent damage to target organs and/or may cause chronic conditions. Contains a known or suspected carcinogen. Possible risk of irreversible effects. Avoid repeated exposure. Prolonged exposure may cause chronic effects. May cause adverse effects on the bone marrow and blood-forming system. Lead compounds may be absorbed by ingestion, by inhalation and through the skin. Lead may damage

kidney function, the blood forming system and the reproductive system.

Target Organ Effects Blood. Central Nervous System (CNS). Eyes. Gastrointestinal tract (GI). Gingival Tissue.

Kidney. Respiratory system. Skin. Teeth. Systemic Toxicity. Reproductive System. May

damage the unborn child.

Aspiration Hazard No information available.

Numerical measures of toxicity Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)
637.00 mg/kg
ATEmix (inhalation-gas)
6,000.00 ppm
ATEmix (inhalation-dust/mist)
0.92 mg/l
ATEmix (inhalation-vapor)
15.00 ATEmix

# 12. ECOLOGICAL INFORMATION

#### **Ecotoxicity**

Very toxic to aquatic life with long lasting effects.

Chemical name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Lead 7439-92-1		96h LC50: = 0.44 mg/L (Cyprinus carpio) 96h LC50: = 1.17 mg/L (Oncorhynchus mykiss) 96h LC50: = 1.32 mg/L (Oncorhynchus mykiss)		48h EC50: = 600 μg/L
Sulfuric acid 7664-93-9		96h LC50: > 500 mg/L (Brachydanio rerio)		24h EC50: = 29 mg/L

# Persistence and Degradability

No information available.

## **Bioaccumulation**

No information available

# Other adverse effects

No information available.

(UL)

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# 13. DISPOSAL CONSIDERATIONS

## Waste treatment methods

Disposal methods This material, as supplied, is a hazardous waste according to federal regulations (40 CFR

261).

**Contaminated Packaging** Do not reuse empty containers.

US EPA Waste Number D002 D004 D008

## California Hazardous Waste Codes 792

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste
Lead	Toxic
7439-92-1	
Sulfuric acid	Toxic
7664-93-9	Corrosive

# 14. TRANSPORT INFORMATION

DOTNOT REGULATEDProper Shipping NameNON REGULATED

Hazard Class N/A

TDG Not regulated

MEX Not regulated

ICAO Not regulated

<u>IATA</u> Not regulated

Proper Shipping Name NON REGULATED

Hazard Class N/A

IMDG/IMO Not regulated

Hazard Class N/A

RID Not regulated

ADR Not regulated

ADN Not regulated

# 15. REGULATORY INFORMATION

# International Inventories

TSCA Complies

DSL All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List



# **US Federal Regulations**

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS No	Weight-%	SARA 313 - Threshold Values %
Lead - 7439-92-1	7439-92-1	60 - 100	0.1
Sulfuric acid - 7664-93-9	7664-93-9	10 - 30	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

# **CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Lead 7439-92-1		X	X	
Sulfuric acid 7664-93-9	1000 lb			Х

# CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	<b>Extremely Hazardous Substances</b>	RQ
		RQs	
Lead 7439-92-1	10 lb		RQ 10 lb final RQ RQ 4.54 kg final RQ
Sulfuric acid 7664-93-9	1000 lb	1000 lb	RQ 1000 lb final RQ RQ 454 kg final RQ

# **US State Regulations**

# **California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical name	California Proposition 65
Lead - 7439-92-1	Carcinogen
	Developmental
	Female Reproductive
	Male Reproductive
Sulfuric acid - 7664-93-9	Carcinogen
Arsenic - 7440-38-2	Carcinogen

# U.S. State Right-to-Know Regulations

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Chemical name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Lead 7439-92-1	Х	X	X	Х	Х
Sulfuric acid 7664-93-9	Х	Х	Х	Х	Х
Antimony 7440-36-0	Х	Х	Х	Х	Х
Arsenic	X	X	X	X	X



7440-38-2			

# International Regulations

#### Mexico

National occupational exposure limits

Component	Carcinogen Status	Exposure Limits
Lead 7439-92-1 ( 60 - 100 )	A3	Mexico: TWA= 0.15 mg/m <sup>3</sup>
Sulfuric acid 7664-93-9 ( 10 - 30 )	A2	Mexico: TWA 1 mg/m <sup>3</sup>

A2 - Suspected Human Carcinogen
A3 - Confirmed Animal Carcinogen

Mexico - Occupational Exposure Limits - Carcinogens

## Canada

**WHMIS Hazard Class** 

Non-controlled

# **16. OTHER INFORMATION**

NFPA Health Hazards 3 Flammability 0 Instability 0 Physical and Chemical Hazards -

HMIS Health Hazards 0 Flammability 0 Physical Hazard 0 Personal Protection

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Prepared By Product Stewardship

23 British American Blvd. Latham, NY 12110 1-800-572-6501 19-Feb-2016

**Issuing Date** 19-Feb-2016 **Revision Date** 19-Feb-2016

Revision Note No information available

#### **Disclaimer**

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# **End of Safety Data Sheet**

# SAFETY DATA SHEET

Issuing Date 19-Feb-2016 Revision Date 19-Feb-2016 Revision Number 1

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# 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier** 

Product Name BattNonSpillSams

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Lead Acid (Non-Spillable) Battery

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Name East Penn Mfg.

Supplier Address Deka Rd

Lyon Station

PA 19536 US

**Supplier Phone Number** Phone:610-682-6361

Fax:610-682-1650

Contact Phone610-682-6361

Supplier Email mgriffith@dekabatteries.com

Emergency telephone number

**Company Emergency Phone** 

610-682-6361

Number

# 2. HAZARDS IDENTIFICATION

#### Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). This product is an article which is a sealed battery and as such does not require an MSDS per the OSHA hazard communication standard unless ruptured. The hazards indicated are for a ruptured battery.

Acute toxicity - Oral Category 4



Acute toxicity - Inhalation (Vapors)	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 1A
Reproductive Toxicity	Category 1A
Specific target organ toxicity (repeated exposure)	Category 1

# GHS Label elements, including precautionary statements

**Emergency Overview** 

Signal word

**Danger** 

#### Hazard Statements

Harmful if swallowed Harmful if inhaled

Toxic if inhaled

Causes severe skin burns and eye damage

May cause cancer

May damage fertility or the unborn child

Causes damage to organs through prolonged or repeated exposure



. This product is an article which contains a chemical substance. Safety information is given for exposure to the article as sold. Intended use of the product should not result in exposure to the chemical substance. This is a battery. In case of rupture: the above hazards exist.

**Appearance** Colorless

Physical state Solid

**Odor** Odorless

# **Precautionary Statements - Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Do not breathe dust/fume/gas/mist/vapors/spray

## **Precautionary Statements - Response**

Immediately call a POISON CENTER or doctor/physician

Specific treatment (see supplemental first aid instructions on this label)

#### **Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician

## Skin

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse

#### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell Immediately call a POISON CENTER or doctor/physician

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Do NOT induce vomiting

## **Precautionary Statements - Storage**

Store locked up

Store in a well-ventilated place. Keep container tightly closed

## **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

Not applicable

#### **Unknown Toxicity**

0 % of the mixture consists of ingredient(s) of unknown toxicity

#### Other information

Very toxic to aquatic life with long lasting effects

## **Interactions with Other Chemicals**

Use of alcoholic beverages may enhance toxic effects.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

.

Chemical name	CAS No	Weight-%	Trade Secret
Lead	7439-92-1	60 - 100	*
Sulfuric acid	7664-93-9	10 - 30	*

<sup>\*</sup>The exact percentage (concentration) of composition has been withheld as a trade secret

# 4. FIRST AID MEASURES

#### First aid measures

**General Advice** First aid is upon rupture of sealed battery.

**Eye contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep

eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present

and easy to do. Continue rinsing. Seek immediate medical attention/advice.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Seek immediate medical attention/advice.

**Inhalation** Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical

attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel

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should) give oxygen. Delayed pulmonary edema may occur. Get medical attention

immediately if symptoms occur.

Ingestion Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water. Never give

anything by mouth to an unconscious person. Call a physician or poison control center

immediately.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. Wear personal protective clothing (see

section 8).

## Most important symptoms and effects, both acute and delayed

Most Important Symptoms and

Effects

Burning sensation. Coughing and/ or wheezing. Difficulty in breathing. Lead poisoning is characterized by a metallic taste in the mouth, loss of appetite indigestion, nausea, vomiting, constipation, sleep disturbances and overall weakness. Severe exposures can lead to shock, circulatory collapse, and death.

#### Indication of any immediate medical attention and special treatment needed

**Notes to Physician** Product is a corrosive material. Use of gastric lavage or emesis is contraindicated.

Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood

pressure may occur with moist rales, frothy sputum, and high pulse pressure.

## 5. FIRE-FIGHTING MEASURES

### **Suitable Extinguishing Media**

Dry chemical. Carbon dioxide (CO2). Water spray.

## Unsuitable extinguishing media

CAUTION: Use of water spray when fighting fire may be inefficient.

# Specific hazards arising from the chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors.

Uniform Fire Code Toxic: Liquid

Corrosive: Acid-Liquid

**Explosion Data** 

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

# Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

# 6. ACCIDENTAL RELEASE MEASURES

# Personal precautions, protective equipment and emergency procedures

Personal precautions Attention! Corrosive material. Avoid contact with skin, eyes or clothing. Ensure adequate

ventilation. Use personal protective equipment as required. Evacuate personnel to safe

areas. Keep people away from and upwind of spill/leak.

Other Information Refer to protective measures listed in Sections 7 and 8.

**Environmental precautions** 

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Should not be released into the

environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment Absorb or cover with dry earth, sand or other non-combustible material and transfer to

containers.

**Methods for cleaning up**Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

# 7. HANDLING AND STORAGE

## Precautions for safe handling

Handling In case of rupture: Handle in accordance with good industrial hygiene and safety practice.

Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash

before reuse.

Conditions for safe storage, including any incompatibilities

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from

moisture. Store locked up. Keep out of the reach of children. Store away from other

materials.

Incompatible Products Acids. Bases. Oxidizing agent.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

# **Control parameters**

# **Exposure Guidelines**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Lead	TWA: 0.05 mg/m <sup>3</sup>	TWA: 50 μg/m³ TWA: 50 μg/m³	IDLH: 100 mg/m <sup>3</sup>
7439-92-1		Pb	TWA: 0.050 mg/m <sup>3</sup>
		Action Level: 30 µg/m³ Poison,	
		See 29 CFR 1910.1025 Action	
		Level: 30 µg/m³ Pb Poison, See	
		29 CFR 1910.1025	



Revision Date 19-Feb-2016 1043641 - BattNonSpillSams

Sulfuric acid	TWA: 0.2 mg/m <sup>3</sup> thoracic fraction	TWA: 1 mg/m <sup>3</sup>	IDLH: 15 mg/m <sup>3</sup>
7664-93-9		(vacated) TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m³

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits NIOSH IDLH Immediately Dangerous to Life or Health

**Other Exposure Guidelines** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962

(11th Cir., 1992)

**Appropriate engineering controls** 

**Engineering Measures** Showers

> Eyewash stations Ventilation systems

Individual protection measures, such as personal protective equipment

Face protection shield. Eye/face protection

Skin and body protection Wear protective gloves and protective clothing. Long sleeved clothing. Chemical resistant

apron. Impervious gloves.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

> respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

> skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended.

Wash hands before breaks and immediately after handling the product. Take off

contaminated clothing and wash before reuse.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

## **Physical and Chemical Properties**

Physical state Colorless **Appearance** Odor Odorless

Color No information available **Odor Threshold** No information available

Property Values Remarks Method

Ha 2 None known None known Melting / freezing point No data available None known Boiling point / boiling range No data available None known No data available Flash Point No data available None known **Evaporation Rate** Flammability (solid, gas) No data available None known

Solid

Flammability Limit in Air

Upper flammability limit No data available No data available Lower flammability limit

Vapor pressure No data available None known Vapor density No data available None known **Specific Gravity** 1.27 None known

**Water Solubility** Immiscible in water None known Solubility in other solvents No data available None known Partition coefficient: n-octanol/water.7 None known

**Autoignition temperature** No data available None known

Decomposition temperatureNo data availableNone knownKinematic viscosityNo data availableNone knownDynamic viscosity26.7None known

**Explosive properties**No data available **Oxidizing properties**No data available

**Other Information** 

Softening Point
VOC Content (%)
Particle Size
No data available
No data available
No data available

**Particle Size Distribution** 

# 10. STABILITY AND REACTIVITY

#### Reactivity

No data available.

## **Chemical stability**

Stable under recommended storage conditions.

## **Possibility of Hazardous Reactions**

None under normal processing.

#### Conditions to avoid

Exposure to air or moisture over prolonged periods. Excessive heat.

#### Incompatible materials

Acids. Bases. Oxidizing agent.

## **Hazardous Decomposition Products**

None known based on information supplied.

# 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

**Product Information** Product does not present an acute toxicity hazard based on known or supplied information.

In case of rupture:.

**Inhalation** Specific test data for the substance or mixture is not available. Toxic by inhalation.

Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may

cause coughing, choking, headache, dizziness, and weakness for several hours.

Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal. May cause irritation of

respiratory tract.

**Eye contact** Specific test data for the substance or mixture is not available. Causes burns. (based on

components). Corrosive to the eyes and may cause severe damage including blindness.

Causes serious eye damage. May cause irreversible damage to eyes.

**Skin contact** Specific test data for the substance or mixture is not available. Causes burns. (based on

components). Prolonged skin contact causes burns.

**Ingestion** Specific test data for the substance or mixture is not available. Harmful if swallowed.

Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways. Ingestion may cause irritation to mucous membranes. Ingestion may cause

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gastrointestinal irritation, nausea, vomiting and diarrhea.

#### **Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sulfuric acid 7664-93-9	= 2140 mg/kg (Rat)	-	= 510 mg/m³ (Rat) 2 h

#### Information on toxicological effects

Symptoms Erythema (skin redness). Burning. May cause blindness. Coughing and/ or wheezing.

Difficulty in breathing.

## Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.

Mutagenic Effects No information available.

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Lead 7439-92-1	А3	Group 2A	Reasonably Anticipated	Х
Sulfuric acid 7664-93-9	A2	Group 1	Known	Х

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity Contains a known or suspected reproductive toxin. Product is or contains a chemical which

is a known or suspected reproductive hazard.

Developmental Toxicity STOT - single exposure

Contains ingredients that have suspected developmental hazards.

No information available.

**STOT - repeated exposure**Causes damage to organs through prolonged or repeated exposure. Based on

classification criteria from the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200), this product has been determined to cause systemic target organ toxicity from

chronic or repeated exposure. (STOT RE).

Chronic Toxicity Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw

necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Effects from this product caused by acute exposure may cause permanent damage to target organs and/or may cause chronic conditions. Contains a known or suspected carcinogen. Possible risk of irreversible effects. Avoid repeated exposure. Prolonged exposure may cause chronic effects. May cause adverse effects on the bone marrow and blood-forming system. Lead compounds may be absorbed by ingestion, by inhalation and through the skin. Lead may damage

kidney function, the blood forming system and the reproductive system.

Target Organ Effects Blood. Central Nervous System (CNS). Eyes. Gastrointestinal tract (GI). Gingival Tissue.

Kidney. Respiratory system. Skin. Teeth. Systemic Toxicity. Reproductive System. May

damage the unborn child.

Aspiration Hazard No information available.

Numerical measures of toxicity Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)
637.00 mg/kg
ATEmix (inhalation-gas)
6,000.00 ppm
ATEmix (inhalation-dust/mist)
0.92 mg/l
ATEmix (inhalation-vapor)
15.00 ATEmix

# 12. ECOLOGICAL INFORMATION

### **Ecotoxicity**

Very toxic to aquatic life with long lasting effects.

Chemical name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Lead 7439-92-1		96h LC50: = 0.44 mg/L (Cyprinus carpio) 96h LC50: = 1.17 mg/L (Oncorhynchus mykiss) 96h LC50: = 1.32 mg/L (Oncorhynchus mykiss)		48h EC50: = 600 μg/L
Sulfuric acid 7664-93-9		96h LC50: > 500 mg/L (Brachydanio rerio)		24h EC50: = 29 mg/L

# Persistence and Degradability

No information available.

# **Bioaccumulation**

No information available

# Other adverse effects

No information available.

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# 13. DISPOSAL CONSIDERATIONS

## Waste treatment methods

Disposal methods This material, as supplied, is a hazardous waste according to federal regulations (40 CFR

261).

Contaminated Packaging Do not reuse empty containers.

US EPA Waste Number D002 D004 D008

## California Hazardous Waste Codes 792

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste
Lead	Toxic
7439-92-1	
Sulfuric acid	Toxic
7664-93-9	Corrosive

# 14. TRANSPORT INFORMATION

DOTNOT REGULATEDProper Shipping NameNON REGULATED

Hazard Class N/A

TDG Not regulated

MEX Not regulated

ICAO Not regulated

IATA Not regulated

Proper Shipping Name NON REGULATED

Hazard Class N/A

IMDG/IMO Not regulated

Hazard Class N/A

RID Not regulated

ADR Not regulated

ADN Not regulated

# 15. REGULATORY INFORMATION

# International Inventories

TSCA Complies

DSL All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List



# **US Federal Regulations**

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS No	Weight-%	SARA 313 - Threshold Values %
Lead - 7439-92-1	7439-92-1	60 - 100	0.1
Sulfuric acid - 7664-93-9	7664-93-9	10 - 30	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

# **CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Lead 7439-92-1		X	X	
Sulfuric acid 7664-93-9	1000 lb			Х

# CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	<b>Extremely Hazardous Substances</b>	RQ
		RQs	
Lead 7439-92-1	10 lb		RQ 10 lb final RQ RQ 4.54 kg final RQ
Sulfuric acid 7664-93-9	1000 lb	1000 lb	RQ 1000 lb final RQ RQ 454 kg final RQ

# **US State Regulations**

# **California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical name	California Proposition 65
Lead - 7439-92-1	Carcinogen
	Developmental
	Female Reproductive
	Male Reproductive
Sulfuric acid - 7664-93-9	Carcinogen
Arsenic - 7440-38-2	Carcinogen

# U.S. State Right-to-Know Regulations

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Chemical name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Lead 7439-92-1	Х	X	X	Х	Х
Sulfuric acid 7664-93-9	Х	Х	Х	Х	Х
Antimony 7440-36-0	Х	Х	Х	Х	Х
Arsenic	X	X	X	X	X



7440-38-2			

# International Regulations

#### Mexico

National occupational exposure limits

Component	Carcinogen Status	Exposure Limits
Lead 7439-92-1 ( 60 - 100 )	А3	Mexico: TWA= 0.15 mg/m <sup>3</sup>
Sulfuric acid 7664-93-9 ( 10 - 30 )	A2	Mexico: TWA 1 mg/m <sup>3</sup>

A2 - Suspected Human Carcinogen A3 - Confirmed Animal Carcinogen

Mexico - Occupational Exposure Limits - Carcinogens

#### Canada

**WHMIS Hazard Class** 

Non-controlled

# 16. OTHER INFORMATION

NFPA Health Hazards 3 Flammability 0 Instability 0 Physical and

HMIS Health Hazards 0 Flammability 0 Physical Hazard 0 Personal Protection

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Prepared By Product Stewardship

23 British American Blvd. Latham, NY 12110 1-800-572-6501

**Issuing Date** 19-Feb-2016 **Revision Date** 19-Feb-2016

Revision Note No information available

#### **Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

# **End of Safety Data Sheet**



# SAFETY DATA SHEET

Issuing Date 19-Feb-2016 Revision Date 19-Feb-2016 Revision Number 1



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# 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier** 

Product Name BattNonSpillSams

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Lead Acid (Non-Spillable) Battery

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Name East Penn Mfg.

Supplier Address Deka Rd

Lyon Station

PA 19536 US

Supplier Phone Number Phone:610-682-6361

Fax:610-682-1650

Contact Phone610-682-6361

Supplier Email mgriffith@dekabatteries.com

Emergency telephone number

**Company Emergency Phone** 

610-682-6361

Number .

# 2. HAZARDS IDENTIFICATION

#### Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). This product is an article which is a sealed battery and as such does not require an MSDS per the OSHA hazard communication standard unless ruptured. The hazards indicated are for a ruptured battery.

Acute toxicity - Oral Category 4



Acute toxicity - Inhalation (Vapors)	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 1A
Reproductive Toxicity	Category 1A
Specific target organ toxicity (repeated exposure)	Category 1

# GHS Label elements, including precautionary statements

**Emergency Overview** 

Signal word

**Danger** 

#### Hazard Statements

Harmful if swallowed Harmful if inhaled

Toxic if inhaled

Causes severe skin burns and eye damage

May cause cancer

May damage fertility or the unborn child

Causes damage to organs through prolonged or repeated exposure



. This product is an article which contains a chemical substance. Safety information is given for exposure to the article as sold. Intended use of the product should not result in exposure to the chemical substance. This is a battery. In case of rupture: the above hazards exist.

**Appearance** Colorless

Physical state Solid

**Odor** Odorless

# **Precautionary Statements - Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Do not breathe dust/fume/gas/mist/vapors/spray

## **Precautionary Statements - Response**

Immediately call a POISON CENTER or doctor/physician

Specific treatment (see supplemental first aid instructions on this label)

#### **Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician

## Skin

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse

#### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell Immediately call a POISON CENTER or doctor/physician

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Do NOT induce vomiting

## **Precautionary Statements - Storage**

Store locked up

Store in a well-ventilated place. Keep container tightly closed

## **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

Not applicable

#### **Unknown Toxicity**

0 % of the mixture consists of ingredient(s) of unknown toxicity

#### Other information

Very toxic to aquatic life with long lasting effects

## **Interactions with Other Chemicals**

Use of alcoholic beverages may enhance toxic effects.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

.

Chemical name	CAS No	Weight-%	Trade Secret
Lead	7439-92-1	60 - 100	*
Sulfuric acid	7664-93-9	10 - 30	*

<sup>\*</sup>The exact percentage (concentration) of composition has been withheld as a trade secret

# 4. FIRST AID MEASURES

#### First aid measures

**General Advice** First aid is upon rupture of sealed battery.

**Eye contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep

eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present

and easy to do. Continue rinsing. Seek immediate medical attention/advice.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Seek immediate medical attention/advice.

**Inhalation** Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical

attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel

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should) give oxygen. Delayed pulmonary edema may occur. Get medical attention

immediately if symptoms occur.

Ingestion Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water. Never give

anything by mouth to an unconscious person. Call a physician or poison control center

immediately.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. Wear personal protective clothing (see

section 8).

## Most important symptoms and effects, both acute and delayed

Most Important Symptoms and

Effects

Burning sensation. Coughing and/ or wheezing. Difficulty in breathing. Lead poisoning is characterized by a metallic taste in the mouth, loss of appetite indigestion, nausea, vomiting, constipation, sleep disturbances and overall weakness. Severe exposures can lead to shock, circulatory collapse, and death.

#### Indication of any immediate medical attention and special treatment needed

**Notes to Physician** Product is a corrosive material. Use of gastric lavage or emesis is contraindicated.

Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood

pressure may occur with moist rales, frothy sputum, and high pulse pressure.

## 5. FIRE-FIGHTING MEASURES

### **Suitable Extinguishing Media**

Dry chemical. Carbon dioxide (CO2). Water spray.

## Unsuitable extinguishing media

CAUTION: Use of water spray when fighting fire may be inefficient.

# Specific hazards arising from the chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors.

Uniform Fire Code Toxic: Liquid

Corrosive: Acid-Liquid

**Explosion Data** 

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

# Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

# 6. ACCIDENTAL RELEASE MEASURES

# Personal precautions, protective equipment and emergency procedures

Personal precautions Attention! Corrosive material. Avoid contact with skin, eyes or clothing. Ensure adequate

ventilation. Use personal protective equipment as required. Evacuate personnel to safe

areas. Keep people away from and upwind of spill/leak.

Other Information Refer to protective measures listed in Sections 7 and 8.

**Environmental precautions** 

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Should not be released into the

environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment Absorb or cover with dry earth, sand or other non-combustible material and transfer to

containers.

**Methods for cleaning up**Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

# 7. HANDLING AND STORAGE

## Precautions for safe handling

Handling In case of rupture: Handle in accordance with good industrial hygiene and safety practice.

Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash

before reuse.

Conditions for safe storage, including any incompatibilities

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from

moisture. Store locked up. Keep out of the reach of children. Store away from other

materials.

Incompatible Products Acids. Bases. Oxidizing agent.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

# **Control parameters**

# **Exposure Guidelines**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Lead	TWA: 0.05 mg/m <sup>3</sup>	TWA: 50 μg/m³ TWA: 50 μg/m³	IDLH: 100 mg/m <sup>3</sup>
7439-92-1		Pb	TWA: 0.050 mg/m <sup>3</sup>
		Action Level: 30 µg/m³ Poison,	
		See 29 CFR 1910.1025 Action	
		Level: 30 µg/m³ Pb Poison, See	
		29 CFR 1910.1025	



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Sulfuric acid	TWA: 0.2 mg/m <sup>3</sup> thoracic fraction	TWA: 1 mg/m <sup>3</sup>	IDLH: 15 mg/m <sup>3</sup>
7664-93-9		(vacated) TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m³

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits NIOSH IDLH Immediately Dangerous to Life or Health

**Other Exposure Guidelines** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962

(11th Cir., 1992)

**Appropriate engineering controls** 

**Engineering Measures** Showers

> Eyewash stations Ventilation systems

Individual protection measures, such as personal protective equipment

Face protection shield. Eye/face protection

Skin and body protection Wear protective gloves and protective clothing. Long sleeved clothing. Chemical resistant

apron. Impervious gloves.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

> respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

> skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended.

Wash hands before breaks and immediately after handling the product. Take off

contaminated clothing and wash before reuse.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

## **Physical and Chemical Properties**

Physical state Colorless **Appearance** Odor Odorless

Color No information available **Odor Threshold** No information available

Property Values Remarks Method

Ha 2 None known None known Melting / freezing point No data available None known Boiling point / boiling range No data available None known No data available Flash Point No data available None known **Evaporation Rate** Flammability (solid, gas) No data available None known

Solid

Flammability Limit in Air

Upper flammability limit No data available No data available Lower flammability limit

Vapor pressure No data available None known Vapor density No data available None known **Specific Gravity** 1.27 None known

**Water Solubility** Immiscible in water None known Solubility in other solvents No data available None known Partition coefficient: n-octanol/water.7 None known

**Autoignition temperature** No data available None known

Decomposition temperatureNo data availableNone knownKinematic viscosityNo data availableNone knownDynamic viscosity26.7None known

**Explosive properties**No data available **Oxidizing properties**No data available

**Other Information** 

Softening Point
VOC Content (%)
Particle Size
No data available
No data available
No data available

**Particle Size Distribution** 

# 10. STABILITY AND REACTIVITY

#### Reactivity

No data available.

## **Chemical stability**

Stable under recommended storage conditions.

## **Possibility of Hazardous Reactions**

None under normal processing.

#### Conditions to avoid

Exposure to air or moisture over prolonged periods. Excessive heat.

#### Incompatible materials

Acids. Bases. Oxidizing agent.

## **Hazardous Decomposition Products**

None known based on information supplied.

# 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

**Product Information** Product does not present an acute toxicity hazard based on known or supplied information.

In case of rupture:.

**Inhalation** Specific test data for the substance or mixture is not available. Toxic by inhalation.

Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may

cause coughing, choking, headache, dizziness, and weakness for several hours.

Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal. May cause irritation of

respiratory tract.

**Eye contact** Specific test data for the substance or mixture is not available. Causes burns. (based on

components). Corrosive to the eyes and may cause severe damage including blindness.

Causes serious eye damage. May cause irreversible damage to eyes.

**Skin contact** Specific test data for the substance or mixture is not available. Causes burns. (based on

components). Prolonged skin contact causes burns.

**Ingestion** Specific test data for the substance or mixture is not available. Harmful if swallowed.

Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways. Ingestion may cause irritation to mucous membranes. Ingestion may cause

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gastrointestinal irritation, nausea, vomiting and diarrhea.

#### **Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sulfuric acid 7664-93-9	= 2140 mg/kg (Rat)	-	= 510 mg/m³ (Rat) 2 h

#### Information on toxicological effects

Symptoms Erythema (skin redness). Burning. May cause blindness. Coughing and/ or wheezing.

Difficulty in breathing.

## Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.

Mutagenic Effects No information available.

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Lead 7439-92-1	А3	Group 2A	Reasonably Anticipated	Х
Sulfuric acid 7664-93-9	A2	Group 1	Known	Х

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity Contains a known or suspected reproductive toxin. Product is or contains a chemical which

is a known or suspected reproductive hazard.

Developmental Toxicity STOT - single exposure

Contains ingredients that have suspected developmental hazards.

No information available.

**STOT - repeated exposure**Causes damage to organs through prolonged or repeated exposure. Based on

classification criteria from the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200), this product has been determined to cause systemic target organ toxicity from

chronic or repeated exposure. (STOT RE).

Chronic Toxicity Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw

necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Effects from this product caused by acute exposure may cause permanent damage to target organs and/or may cause chronic conditions. Contains a known or suspected carcinogen. Possible risk of irreversible effects. Avoid repeated exposure. Prolonged exposure may cause chronic effects. May cause adverse effects on the bone marrow and blood-forming system. Lead compounds may be absorbed by ingestion, by inhalation and through the skin. Lead may damage

kidney function, the blood forming system and the reproductive system.

Target Organ Effects Blood. Central Nervous System (CNS). Eyes. Gastrointestinal tract (GI). Gingival Tissue.

Kidney. Respiratory system. Skin. Teeth. Systemic Toxicity. Reproductive System. May

damage the unborn child.

Aspiration Hazard No information available.

Numerical measures of toxicity Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)
637.00 mg/kg
ATEmix (inhalation-gas)
6,000.00 ppm
ATEmix (inhalation-dust/mist)
0.92 mg/l
ATEmix (inhalation-vapor)
15.00 ATEmix

# 12. ECOLOGICAL INFORMATION

#### **Ecotoxicity**

Very toxic to aquatic life with long lasting effects.

Chemical name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Lead 7439-92-1		96h LC50: = 0.44 mg/L (Cyprinus carpio) 96h LC50: = 1.17 mg/L (Oncorhynchus mykiss) 96h LC50: = 1.32 mg/L (Oncorhynchus mykiss)		48h EC50: = 600 μg/L
Sulfuric acid 7664-93-9		96h LC50: > 500 mg/L (Brachydanio rerio)		24h EC50: = 29 mg/L

# Persistence and Degradability

No information available.

## **Bioaccumulation**

No information available

# Other adverse effects

No information available.

(UL)

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# 13. DISPOSAL CONSIDERATIONS

## Waste treatment methods

Disposal methods This material, as supplied, is a hazardous waste according to federal regulations (40 CFR

261).

**Contaminated Packaging** Do not reuse empty containers.

US EPA Waste Number D002 D004 D008

## California Hazardous Waste Codes 792

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste
Lead	Toxic
7439-92-1	
Sulfuric acid	Toxic
7664-93-9	Corrosive

# 14. TRANSPORT INFORMATION

DOTNOT REGULATEDProper Shipping NameNON REGULATED

Hazard Class N/A

TDG Not regulated

MEX Not regulated

ICAO Not regulated

<u>IATA</u> Not regulated

Proper Shipping Name NON REGULATED

Hazard Class N/A

IMDG/IMO Not regulated

Hazard Class N/A

RID Not regulated

ADR Not regulated

ADN Not regulated

# 15. REGULATORY INFORMATION

# International Inventories

TSCA Complies

DSL All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List



# **US Federal Regulations**

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS No	Weight-%	SARA 313 - Threshold Values %
Lead - 7439-92-1	7439-92-1	60 - 100	0.1
Sulfuric acid - 7664-93-9	7664-93-9	10 - 30	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

# **CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Lead 7439-92-1		X	X	
Sulfuric acid 7664-93-9	1000 lb			Х

# CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	<b>Extremely Hazardous Substances</b>	RQ
		RQs	
Lead 7439-92-1	10 lb		RQ 10 lb final RQ RQ 4.54 kg final RQ
Sulfuric acid 7664-93-9	1000 lb	1000 lb	RQ 1000 lb final RQ RQ 454 kg final RQ

# **US State Regulations**

# **California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical name	California Proposition 65
Lead - 7439-92-1	Carcinogen
	Developmental
	Female Reproductive
	Male Reproductive
Sulfuric acid - 7664-93-9	Carcinogen
Arsenic - 7440-38-2	Carcinogen

# U.S. State Right-to-Know Regulations

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Chemical name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Lead 7439-92-1	Х	X	X	Х	Х
Sulfuric acid 7664-93-9	Х	Х	Х	Х	Х
Antimony 7440-36-0	Х	Х	Х	Х	Х
Arsenic	X	X	X	X	X



7440-38-2			

# International Regulations

#### Mexico

National occupational exposure limits

Component	Carcinogen Status	Exposure Limits
Lead 7439-92-1 ( 60 - 100 )	A3	Mexico: TWA= 0.15 mg/m <sup>3</sup>
Sulfuric acid 7664-93-9 ( 10 - 30 )	A2	Mexico: TWA 1 mg/m <sup>3</sup>

A2 - Suspected Human Carcinogen
A3 - Confirmed Animal Carcinogen

Mexico - Occupational Exposure Limits - Carcinogens

## Canada

**WHMIS Hazard Class** 

Non-controlled

# **16. OTHER INFORMATION**

NFPA Health Hazards 3 Flammability 0 Instability 0 Physical and Chemical Hazards -

HMIS Health Hazards 0 Flammability 0 Physical Hazard 0 Personal Protection

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Prepared By Product Stewardship

23 British American Blvd. Latham, NY 12110 1-800-572-6501 19-Feb-2016

**Issuing Date** 19-Feb-2016 **Revision Date** 19-Feb-2016

Revision Note No information available

#### **Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

# **End of Safety Data Sheet**

# SAFETY DATA SHEET

Issuing Date 19-Feb-2016 Revision Date 19-Feb-2016 Revision Number 1

The supplier identified below generated this SDS using the UL SDS template. UL did not test, certify, or approve the substance described in this SDS, and all information in this SDS was provided by the supplier or was reproduced from publically available regulatory data sources. UL makes no representations or warranties regarding the completeness or accuracy of the information in this SDS and disclaims all liability in connection with the use of this information or the substance described in this SDS. The layout, appearance and format of this SDS is © 2014 UL LLC. All rights reserved.

# 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier** 

Product Name BattNonSpillSams

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Lead Acid (Non-Spillable) Battery

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Name East Penn Mfg.

Supplier Address Deka Rd

Lyon Station

PA 19536 US

**Supplier Phone Number** Phone:610-682-6361

Fax:610-682-1650

Contact Phone610-682-6361

Supplier Email mgriffith@dekabatteries.com

Emergency telephone number

**Company Emergency Phone** 

610-682-6361

Number

# 2. HAZARDS IDENTIFICATION

#### Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). This product is an article which is a sealed battery and as such does not require an MSDS per the OSHA hazard communication standard unless ruptured. The hazards indicated are for a ruptured battery.

Acute toxicity - Oral Category 4



Acute toxicity - Inhalation (Vapors)	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 1A
Reproductive Toxicity	Category 1A
Specific target organ toxicity (repeated exposure)	Category 1

# GHS Label elements, including precautionary statements

**Emergency Overview** 

Signal word

**Danger** 

#### Hazard Statements

Harmful if swallowed Harmful if inhaled

Toxic if inhaled

Causes severe skin burns and eye damage

May cause cancer

May damage fertility or the unborn child

Causes damage to organs through prolonged or repeated exposure



. This product is an article which contains a chemical substance. Safety information is given for exposure to the article as sold. Intended use of the product should not result in exposure to the chemical substance. This is a battery. In case of rupture: the above hazards exist.

**Appearance** Colorless

Physical state Solid

**Odor** Odorless

# **Precautionary Statements - Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Do not breathe dust/fume/gas/mist/vapors/spray

## **Precautionary Statements - Response**

Immediately call a POISON CENTER or doctor/physician

Specific treatment (see supplemental first aid instructions on this label)

#### **Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician

## Skin

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse

#### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell Immediately call a POISON CENTER or doctor/physician

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Do NOT induce vomiting

## **Precautionary Statements - Storage**

Store locked up

Store in a well-ventilated place. Keep container tightly closed

## **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

Not applicable

#### **Unknown Toxicity**

0 % of the mixture consists of ingredient(s) of unknown toxicity

#### Other information

Very toxic to aquatic life with long lasting effects

## **Interactions with Other Chemicals**

Use of alcoholic beverages may enhance toxic effects.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

.

Chemical name	CAS No	Weight-%	Trade Secret
Lead	7439-92-1	60 - 100	*
Sulfuric acid	7664-93-9	10 - 30	*

<sup>\*</sup>The exact percentage (concentration) of composition has been withheld as a trade secret

# 4. FIRST AID MEASURES

#### First aid measures

**General Advice** First aid is upon rupture of sealed battery.

**Eye contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep

eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present

and easy to do. Continue rinsing. Seek immediate medical attention/advice.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Seek immediate medical attention/advice.

**Inhalation** Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical

attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel

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should) give oxygen. Delayed pulmonary edema may occur. Get medical attention

immediately if symptoms occur.

Ingestion Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water. Never give

anything by mouth to an unconscious person. Call a physician or poison control center

immediately.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. Wear personal protective clothing (see

section 8).

## Most important symptoms and effects, both acute and delayed

Most Important Symptoms and

Effects

Burning sensation. Coughing and/ or wheezing. Difficulty in breathing. Lead poisoning is characterized by a metallic taste in the mouth, loss of appetite indigestion, nausea, vomiting, constipation, sleep disturbances and overall weakness. Severe exposures can lead to shock, circulatory collapse, and death.

#### Indication of any immediate medical attention and special treatment needed

**Notes to Physician** Product is a corrosive material. Use of gastric lavage or emesis is contraindicated.

Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood

pressure may occur with moist rales, frothy sputum, and high pulse pressure.

## 5. FIRE-FIGHTING MEASURES

### **Suitable Extinguishing Media**

Dry chemical. Carbon dioxide (CO2). Water spray.

## Unsuitable extinguishing media

CAUTION: Use of water spray when fighting fire may be inefficient.

# Specific hazards arising from the chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors.

Uniform Fire Code Toxic: Liquid

Corrosive: Acid-Liquid

**Explosion Data** 

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

# Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

# 6. ACCIDENTAL RELEASE MEASURES

# Personal precautions, protective equipment and emergency procedures

Personal precautions Attention! Corrosive material. Avoid contact with skin, eyes or clothing. Ensure adequate

ventilation. Use personal protective equipment as required. Evacuate personnel to safe

areas. Keep people away from and upwind of spill/leak.

Other Information Refer to protective measures listed in Sections 7 and 8.

**Environmental precautions** 

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Should not be released into the

environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment Absorb or cover with dry earth, sand or other non-combustible material and transfer to

containers.

**Methods for cleaning up**Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

# 7. HANDLING AND STORAGE

## Precautions for safe handling

Handling In case of rupture: Handle in accordance with good industrial hygiene and safety practice.

Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash

before reuse.

Conditions for safe storage, including any incompatibilities

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from

moisture. Store locked up. Keep out of the reach of children. Store away from other

materials.

Incompatible Products Acids. Bases. Oxidizing agent.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

# **Control parameters**

# **Exposure Guidelines**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Lead	TWA: 0.05 mg/m <sup>3</sup>	TWA: 50 μg/m³ TWA: 50 μg/m³	IDLH: 100 mg/m <sup>3</sup>
7439-92-1		Pb	TWA: 0.050 mg/m <sup>3</sup>
		Action Level: 30 µg/m³ Poison,	
		See 29 CFR 1910.1025 Action	
		Level: 30 µg/m³ Pb Poison, See	
		29 CFR 1910.1025	



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Sulfuric acid	TWA: 0.2 mg/m <sup>3</sup> thoracic fraction	TWA: 1 mg/m <sup>3</sup>	IDLH: 15 mg/m <sup>3</sup>
7664-93-9		(vacated) TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m³

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits NIOSH IDLH Immediately Dangerous to Life or Health

**Other Exposure Guidelines** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962

(11th Cir., 1992)

**Appropriate engineering controls** 

**Engineering Measures** Showers

> Eyewash stations Ventilation systems

Individual protection measures, such as personal protective equipment

Face protection shield. Eye/face protection

Skin and body protection Wear protective gloves and protective clothing. Long sleeved clothing. Chemical resistant

apron. Impervious gloves.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

> respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

> skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended.

Wash hands before breaks and immediately after handling the product. Take off

contaminated clothing and wash before reuse.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

## **Physical and Chemical Properties**

Physical state Colorless **Appearance** Odor Odorless

Color No information available **Odor Threshold** No information available

Property Values Remarks Method

Ha 2 None known None known Melting / freezing point No data available None known Boiling point / boiling range No data available None known No data available Flash Point No data available None known **Evaporation Rate** Flammability (solid, gas) No data available None known

Solid

Flammability Limit in Air

Upper flammability limit No data available No data available Lower flammability limit

Vapor pressure No data available None known Vapor density No data available None known **Specific Gravity** 1.27 None known

**Water Solubility** Immiscible in water None known Solubility in other solvents No data available None known Partition coefficient: n-octanol/water.7 None known

**Autoignition temperature** No data available None known

Decomposition temperatureNo data availableNone knownKinematic viscosityNo data availableNone knownDynamic viscosity26.7None known

**Explosive properties**No data available **Oxidizing properties**No data available

**Other Information** 

Softening Point
VOC Content (%)
Particle Size
No data available
No data available
No data available

**Particle Size Distribution** 

# 10. STABILITY AND REACTIVITY

#### Reactivity

No data available.

## **Chemical stability**

Stable under recommended storage conditions.

## **Possibility of Hazardous Reactions**

None under normal processing.

#### Conditions to avoid

Exposure to air or moisture over prolonged periods. Excessive heat.

#### Incompatible materials

Acids. Bases. Oxidizing agent.

## **Hazardous Decomposition Products**

None known based on information supplied.

# 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

**Product Information** Product does not present an acute toxicity hazard based on known or supplied information.

In case of rupture:.

**Inhalation** Specific test data for the substance or mixture is not available. Toxic by inhalation.

Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may

cause coughing, choking, headache, dizziness, and weakness for several hours.

Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal. May cause irritation of

respiratory tract.

**Eye contact** Specific test data for the substance or mixture is not available. Causes burns. (based on

components). Corrosive to the eyes and may cause severe damage including blindness.

Causes serious eye damage. May cause irreversible damage to eyes.

**Skin contact** Specific test data for the substance or mixture is not available. Causes burns. (based on

components). Prolonged skin contact causes burns.

**Ingestion** Specific test data for the substance or mixture is not available. Harmful if swallowed.

Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways. Ingestion may cause irritation to mucous membranes. Ingestion may cause

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gastrointestinal irritation, nausea, vomiting and diarrhea.

#### **Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sulfuric acid 7664-93-9	= 2140 mg/kg (Rat)	-	= 510 mg/m³ (Rat) 2 h

#### Information on toxicological effects

Symptoms Erythema (skin redness). Burning. May cause blindness. Coughing and/ or wheezing.

Difficulty in breathing.

## Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.

Mutagenic Effects No information available.

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Lead 7439-92-1	А3	Group 2A	Reasonably Anticipated	Х
Sulfuric acid 7664-93-9	A2	Group 1	Known	Х

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity Contains a known or suspected reproductive toxin. Product is or contains a chemical which

is a known or suspected reproductive hazard.

Developmental Toxicity STOT - single exposure

Contains ingredients that have suspected developmental hazards.

No information available.

**STOT - repeated exposure**Causes damage to organs through prolonged or repeated exposure. Based on

classification criteria from the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200), this product has been determined to cause systemic target organ toxicity from

chronic or repeated exposure. (STOT RE).

Chronic Toxicity Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw

necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Effects from this product caused by acute exposure may cause permanent damage to target organs and/or may cause chronic conditions. Contains a known or suspected carcinogen. Possible risk of irreversible effects. Avoid repeated exposure. Prolonged exposure may cause chronic effects. May cause adverse effects on the bone marrow and blood-forming system. Lead compounds may be absorbed by ingestion, by inhalation and through the skin. Lead may damage

kidney function, the blood forming system and the reproductive system.

Target Organ Effects Blood. Central Nervous System (CNS). Eyes. Gastrointestinal tract (GI). Gingival Tissue.

Kidney. Respiratory system. Skin. Teeth. Systemic Toxicity. Reproductive System. May

damage the unborn child.

Aspiration Hazard No information available.

Numerical measures of toxicity Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)
637.00 mg/kg
ATEmix (inhalation-gas)
6,000.00 ppm
ATEmix (inhalation-dust/mist)
0.92 mg/l
ATEmix (inhalation-vapor)
15.00 ATEmix

# 12. ECOLOGICAL INFORMATION

#### **Ecotoxicity**

Very toxic to aquatic life with long lasting effects.

Chemical name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Lead 7439-92-1		96h LC50: = 0.44 mg/L (Cyprinus carpio) 96h LC50: = 1.17 mg/L (Oncorhynchus mykiss) 96h LC50: = 1.32 mg/L (Oncorhynchus mykiss)		48h EC50: = 600 μg/L
Sulfuric acid 7664-93-9		96h LC50: > 500 mg/L (Brachydanio rerio)		24h EC50: = 29 mg/L

# Persistence and Degradability

No information available.

## **Bioaccumulation**

No information available

# Other adverse effects

No information available.

(UL)

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# 13. DISPOSAL CONSIDERATIONS

## Waste treatment methods

Disposal methods This material, as supplied, is a hazardous waste according to federal regulations (40 CFR

261).

**Contaminated Packaging** Do not reuse empty containers.

US EPA Waste Number D002 D004 D008

## California Hazardous Waste Codes 792

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste
Lead	Toxic
7439-92-1	
Sulfuric acid	Toxic
7664-93-9	Corrosive

# 14. TRANSPORT INFORMATION

DOTNOT REGULATEDProper Shipping NameNON REGULATED

Hazard Class N/A

TDG Not regulated

MEX Not regulated

ICAO Not regulated

<u>IATA</u> Not regulated

Proper Shipping Name NON REGULATED

Hazard Class N/A

IMDG/IMO Not regulated

Hazard Class N/A

RID Not regulated

ADR Not regulated

ADN Not regulated

# 15. REGULATORY INFORMATION

# International Inventories

TSCA Complies

DSL All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List



# **US Federal Regulations**

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS No	Weight-%	SARA 313 - Threshold Values %
Lead - 7439-92-1	7439-92-1	60 - 100	0.1
Sulfuric acid - 7664-93-9	7664-93-9	10 - 30	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

# **CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Lead 7439-92-1		X	X	
Sulfuric acid 7664-93-9	1000 lb			Х

# CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	<b>Extremely Hazardous Substances</b>	RQ
		RQs	
Lead 7439-92-1	10 lb		RQ 10 lb final RQ RQ 4.54 kg final RQ
Sulfuric acid 7664-93-9	1000 lb	1000 lb	RQ 1000 lb final RQ RQ 454 kg final RQ

# **US State Regulations**

# **California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical name	California Proposition 65
Lead - 7439-92-1	Carcinogen
	Developmental
	Female Reproductive
	Male Reproductive
Sulfuric acid - 7664-93-9	Carcinogen
Arsenic - 7440-38-2	Carcinogen

# U.S. State Right-to-Know Regulations

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Chemical name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Lead 7439-92-1	Х	X	X	Х	Х
Sulfuric acid 7664-93-9	Х	Х	Х	Х	Х
Antimony 7440-36-0	Х	Х	Х	Х	Х
Arsenic	X	X	X	X	X



7440-38-2			

# International Regulations

#### Mexico

National occupational exposure limits

Component	Carcinogen Status	Exposure Limits
Lead 7439-92-1 ( 60 - 100 )	A3	Mexico: TWA= 0.15 mg/m <sup>3</sup>
Sulfuric acid 7664-93-9 ( 10 - 30 )	A2	Mexico: TWA 1 mg/m <sup>3</sup>

A2 - Suspected Human Carcinogen
A3 - Confirmed Animal Carcinogen

Mexico - Occupational Exposure Limits - Carcinogens

## Canada

**WHMIS Hazard Class** 

Non-controlled

# **16. OTHER INFORMATION**

NFPA Health Hazards 3 Flammability 0 Instability 0 Physical and Chemical Hazards -

HMIS Health Hazards 0 Flammability 0 Physical Hazard 0 Personal Protection

Χ

Prepared By Product Stewardship

23 British American Blvd. Latham, NY 12110 1-800-572-6501 19-Feb-2016

**Issuing Date** 19-Feb-2016 **Revision Date** 19-Feb-2016

Revision Note No information available

#### **Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

# **End of Safety Data Sheet**

# SAFETY DATA SHEET

Issuing Date 19-Feb-2016 Revision Date 19-Feb-2016 Revision Number 1

The supplier identified below generated this SDS using the UL SDS template. UL did not test, certify, or approve the substance described in this SDS, and all information in this SDS was provided by the supplier or was reproduced from publically available regulatory data sources. UL makes no representations or warranties regarding the completeness or accuracy of the information in this SDS and disclaims all liability in connection with the use of this information or the substance described in this SDS. The layout, appearance and format of this SDS is © 2014 UL LLC. All rights reserved.

# 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier** 

Product Name BattNonSpillSams

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Lead Acid (Non-Spillable) Battery

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Name East Penn Mfg.

Supplier Address Deka Rd

Lyon Station

PA 19536 US

**Supplier Phone Number** Phone:610-682-6361

Fax:610-682-1650

Contact Phone610-682-6361

Supplier Email mgriffith@dekabatteries.com

Emergency telephone number

**Company Emergency Phone** 

610-682-6361

Number

# 2. HAZARDS IDENTIFICATION

#### Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). This product is an article which is a sealed battery and as such does not require an MSDS per the OSHA hazard communication standard unless ruptured. The hazards indicated are for a ruptured battery.

Acute toxicity - Oral Category 4



Acute toxicity - Inhalation (Vapors)	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 1A
Reproductive Toxicity	Category 1A
Specific target organ toxicity (repeated exposure)	Category 1

# GHS Label elements, including precautionary statements

**Emergency Overview** 

Signal word

**Danger** 

#### Hazard Statements

Harmful if swallowed Harmful if inhaled

Toxic if inhaled

Causes severe skin burns and eye damage

May cause cancer

May damage fertility or the unborn child

Causes damage to organs through prolonged or repeated exposure



. This product is an article which contains a chemical substance. Safety information is given for exposure to the article as sold. Intended use of the product should not result in exposure to the chemical substance. This is a battery. In case of rupture: the above hazards exist.

**Appearance** Colorless

Physical state Solid

**Odor** Odorless

# **Precautionary Statements - Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Do not breathe dust/fume/gas/mist/vapors/spray

## **Precautionary Statements - Response**

Immediately call a POISON CENTER or doctor/physician

Specific treatment (see supplemental first aid instructions on this label)

#### **Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician

## Skin

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse

#### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell Immediately call a POISON CENTER or doctor/physician

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Do NOT induce vomiting

## **Precautionary Statements - Storage**

Store locked up

Store in a well-ventilated place. Keep container tightly closed

## **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

Not applicable

#### **Unknown Toxicity**

0 % of the mixture consists of ingredient(s) of unknown toxicity

#### Other information

Very toxic to aquatic life with long lasting effects

## **Interactions with Other Chemicals**

Use of alcoholic beverages may enhance toxic effects.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

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Chemical name	CAS No	Weight-%	Trade Secret
Lead	7439-92-1	60 - 100	*
Sulfuric acid	7664-93-9	10 - 30	*

<sup>\*</sup>The exact percentage (concentration) of composition has been withheld as a trade secret

# 4. FIRST AID MEASURES

#### First aid measures

**General Advice** First aid is upon rupture of sealed battery.

**Eye contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep

eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present

and easy to do. Continue rinsing. Seek immediate medical attention/advice.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Seek immediate medical attention/advice.

**Inhalation** Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical

attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel

**U** 

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should) give oxygen. Delayed pulmonary edema may occur. Get medical attention

immediately if symptoms occur.

Ingestion Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water. Never give

anything by mouth to an unconscious person. Call a physician or poison control center

immediately.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. Wear personal protective clothing (see

section 8).

## Most important symptoms and effects, both acute and delayed

Most Important Symptoms and

Effects

Burning sensation. Coughing and/ or wheezing. Difficulty in breathing. Lead poisoning is characterized by a metallic taste in the mouth, loss of appetite indigestion, nausea, vomiting, constipation, sleep disturbances and overall weakness. Severe exposures can lead to shock, circulatory collapse, and death.

#### Indication of any immediate medical attention and special treatment needed

**Notes to Physician** Product is a corrosive material. Use of gastric lavage or emesis is contraindicated.

Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood

pressure may occur with moist rales, frothy sputum, and high pulse pressure.

## 5. FIRE-FIGHTING MEASURES

### **Suitable Extinguishing Media**

Dry chemical. Carbon dioxide (CO2). Water spray.

## Unsuitable extinguishing media

CAUTION: Use of water spray when fighting fire may be inefficient.

# Specific hazards arising from the chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors.

Uniform Fire Code Toxic: Liquid

Corrosive: Acid-Liquid

**Explosion Data** 

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

# Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

# 6. ACCIDENTAL RELEASE MEASURES

# Personal precautions, protective equipment and emergency procedures

Personal precautions Attention! Corrosive material. Avoid contact with skin, eyes or clothing. Ensure adequate

ventilation. Use personal protective equipment as required. Evacuate personnel to safe

areas. Keep people away from and upwind of spill/leak.

Other Information Refer to protective measures listed in Sections 7 and 8.

**Environmental precautions** 

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Should not be released into the

environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment Absorb or cover with dry earth, sand or other non-combustible material and transfer to

containers.

**Methods for cleaning up**Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

# 7. HANDLING AND STORAGE

## Precautions for safe handling

Handling In case of rupture: Handle in accordance with good industrial hygiene and safety practice.

Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash

before reuse.

Conditions for safe storage, including any incompatibilities

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from

moisture. Store locked up. Keep out of the reach of children. Store away from other

materials.

Incompatible Products Acids. Bases. Oxidizing agent.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

# **Control parameters**

# **Exposure Guidelines**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Lead	TWA: 0.05 mg/m <sup>3</sup>	TWA: 50 μg/m³ TWA: 50 μg/m³	IDLH: 100 mg/m <sup>3</sup>
7439-92-1		Pb	TWA: 0.050 mg/m <sup>3</sup>
		Action Level: 30 µg/m³ Poison,	
		See 29 CFR 1910.1025 Action	
		Level: 30 µg/m³ Pb Poison, See	
		29 CFR 1910.1025	



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Sulfuric acid	TWA: 0.2 mg/m <sup>3</sup> thoracic fraction	TWA: 1 mg/m <sup>3</sup>	IDLH: 15 mg/m <sup>3</sup>
7664-93-9		(vacated) TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m³

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits NIOSH IDLH Immediately Dangerous to Life or Health

**Other Exposure Guidelines** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962

(11th Cir., 1992)

**Appropriate engineering controls** 

**Engineering Measures** Showers

> Eyewash stations Ventilation systems

Individual protection measures, such as personal protective equipment

Face protection shield. Eye/face protection

Skin and body protection Wear protective gloves and protective clothing. Long sleeved clothing. Chemical resistant

apron. Impervious gloves.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

> respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

> skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended.

Wash hands before breaks and immediately after handling the product. Take off

contaminated clothing and wash before reuse.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

## **Physical and Chemical Properties**

Physical state Colorless **Appearance** Odor Odorless

Color No information available **Odor Threshold** No information available

Property Values Remarks Method

Ha 2 None known None known Melting / freezing point No data available None known Boiling point / boiling range No data available None known No data available Flash Point No data available None known **Evaporation Rate** Flammability (solid, gas) No data available None known

Solid

Flammability Limit in Air

Upper flammability limit No data available No data available Lower flammability limit

Vapor pressure No data available None known Vapor density No data available None known **Specific Gravity** 1.27 None known

**Water Solubility** Immiscible in water None known Solubility in other solvents No data available None known Partition coefficient: n-octanol/water.7 None known

**Autoignition temperature** No data available None known

Decomposition temperatureNo data availableNone knownKinematic viscosityNo data availableNone knownDynamic viscosity26.7None known

**Explosive properties**No data available **Oxidizing properties**No data available

**Other Information** 

Softening Point
VOC Content (%)
Particle Size
No data available
No data available
No data available

**Particle Size Distribution** 

# 10. STABILITY AND REACTIVITY

#### Reactivity

No data available.

## **Chemical stability**

Stable under recommended storage conditions.

## **Possibility of Hazardous Reactions**

None under normal processing.

#### Conditions to avoid

Exposure to air or moisture over prolonged periods. Excessive heat.

#### Incompatible materials

Acids. Bases. Oxidizing agent.

## **Hazardous Decomposition Products**

None known based on information supplied.

# 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

**Product Information** Product does not present an acute toxicity hazard based on known or supplied information.

In case of rupture:.

**Inhalation** Specific test data for the substance or mixture is not available. Toxic by inhalation.

Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may

cause coughing, choking, headache, dizziness, and weakness for several hours.

Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal. May cause irritation of

respiratory tract.

**Eye contact** Specific test data for the substance or mixture is not available. Causes burns. (based on

components). Corrosive to the eyes and may cause severe damage including blindness.

Causes serious eye damage. May cause irreversible damage to eyes.

**Skin contact** Specific test data for the substance or mixture is not available. Causes burns. (based on

components). Prolonged skin contact causes burns.

**Ingestion** Specific test data for the substance or mixture is not available. Harmful if swallowed.

Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways. Ingestion may cause irritation to mucous membranes. Ingestion may cause

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gastrointestinal irritation, nausea, vomiting and diarrhea.

#### **Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sulfuric acid 7664-93-9	= 2140 mg/kg (Rat)	-	= 510 mg/m³ (Rat) 2 h

#### Information on toxicological effects

Symptoms Erythema (skin redness). Burning. May cause blindness. Coughing and/ or wheezing.

Difficulty in breathing.

## Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.

Mutagenic Effects No information available.

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Lead 7439-92-1	А3	Group 2A	Reasonably Anticipated	Х
Sulfuric acid 7664-93-9	A2	Group 1	Known	Х

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity Contains a known or suspected reproductive toxin. Product is or contains a chemical which

is a known or suspected reproductive hazard.

Developmental Toxicity STOT - single exposure

Contains ingredients that have suspected developmental hazards.

No information available.

**STOT - repeated exposure**Causes damage to organs through prolonged or repeated exposure. Based on

classification criteria from the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200), this product has been determined to cause systemic target organ toxicity from

chronic or repeated exposure. (STOT RE).

Chronic Toxicity Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw

necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Effects from this product caused by acute exposure may cause permanent damage to target organs and/or may cause chronic conditions. Contains a known or suspected carcinogen. Possible risk of irreversible effects. Avoid repeated exposure. Prolonged exposure may cause chronic effects. May cause adverse effects on the bone marrow and blood-forming system. Lead compounds may be absorbed by ingestion, by inhalation and through the skin. Lead may damage

kidney function, the blood forming system and the reproductive system.

Target Organ Effects Blood. Central Nervous System (CNS). Eyes. Gastrointestinal tract (GI). Gingival Tissue.

Kidney. Respiratory system. Skin. Teeth. Systemic Toxicity. Reproductive System. May

damage the unborn child.

Aspiration Hazard No information available.

Numerical measures of toxicity Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)
637.00 mg/kg
ATEmix (inhalation-gas)
6,000.00 ppm
ATEmix (inhalation-dust/mist)
0.92 mg/l
ATEmix (inhalation-vapor)
15.00 ATEmix

# 12. ECOLOGICAL INFORMATION

### **Ecotoxicity**

Very toxic to aquatic life with long lasting effects.

Chemical name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Lead 7439-92-1		96h LC50: = 0.44 mg/L (Cyprinus carpio) 96h LC50: = 1.17 mg/L (Oncorhynchus mykiss) 96h LC50: = 1.32 mg/L (Oncorhynchus mykiss)		48h EC50: = 600 μg/L
Sulfuric acid 7664-93-9		96h LC50: > 500 mg/L (Brachydanio rerio)		24h EC50: = 29 mg/L

# Persistence and Degradability

No information available.

# **Bioaccumulation**

No information available

# Other adverse effects

No information available.

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## 13. DISPOSAL CONSIDERATIONS

#### Waste treatment methods

Disposal methods This material, as supplied, is a hazardous waste according to federal regulations (40 CFR

261).

Contaminated Packaging Do not reuse empty containers.

US EPA Waste Number D002 D004 D008

#### California Hazardous Waste Codes 792

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste
Lead	Toxic
7439-92-1	
Sulfuric acid	Toxic
7664-93-9	Corrosive

## 14. TRANSPORT INFORMATION

DOTNOT REGULATEDProper Shipping NameNON REGULATED

Hazard Class N/A

TDG Not regulated

MEX Not regulated

ICAO Not regulated

IATA Not regulated

Proper Shipping Name NON REGULATED

Hazard Class N/A

IMDG/IMO Not regulated

Hazard Class N/A

RID Not regulated

ADR Not regulated

ADN Not regulated

## 15. REGULATORY INFORMATION

## International Inventories

TSCA Complies

DSL All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List



## **US Federal Regulations**

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS No	Weight-%	SARA 313 - Threshold Values %
Lead - 7439-92-1	7439-92-1	60 - 100	0.1
Sulfuric acid - 7664-93-9	7664-93-9	10 - 30	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

## **CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Lead 7439-92-1		X	X	
Sulfuric acid 7664-93-9	1000 lb			Х

## CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	<b>Extremely Hazardous Substances</b>	RQ
		RQs	
Lead 7439-92-1	10 lb		RQ 10 lb final RQ RQ 4.54 kg final RQ
Sulfuric acid 7664-93-9	1000 lb	1000 lb	RQ 1000 lb final RQ RQ 454 kg final RQ

## **US State Regulations**

## **California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical name	California Proposition 65
Lead - 7439-92-1	Carcinogen
	Developmental
	Female Reproductive
	Male Reproductive
Sulfuric acid - 7664-93-9	Carcinogen
Arsenic - 7440-38-2	Carcinogen

## U.S. State Right-to-Know Regulations

.

Chemical name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Lead 7439-92-1	Х	X	X	Х	Х
Sulfuric acid 7664-93-9	Х	Х	Х	Х	Х
Antimony 7440-36-0	Х	Х	Х	Х	Х
Arsenic	X	X	X	X	X



7440-38-2			

## International Regulations

#### Mexico

National occupational exposure limits

Component	Carcinogen Status	Exposure Limits
Lead 7439-92-1 ( 60 - 100 )	А3	Mexico: TWA= 0.15 mg/m <sup>3</sup>
Sulfuric acid 7664-93-9 ( 10 - 30 )	A2	Mexico: TWA 1 mg/m <sup>3</sup>

A2 - Suspected Human Carcinogen A3 - Confirmed Animal Carcinogen

Mexico - Occupational Exposure Limits - Carcinogens

#### Canada

**WHMIS Hazard Class** 

Non-controlled

## 16. OTHER INFORMATION

NFPA Health Hazards 3 Flammability 0 Instability 0 Physical and

HMIS Health Hazards 0 Flammability 0 Physical Hazard 0 Personal Protection

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Prepared By Product Stewardship

23 British American Blvd. Latham, NY 12110 1-800-572-6501

**Issuing Date** 19-Feb-2016 **Revision Date** 19-Feb-2016

Revision Note No information available

#### **Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

## **End of Safety Data Sheet**



# SAFETY DATA SHEET

Issuing Date 19-Feb-2016 Revision Date 19-Feb-2016 Revision Number 1



The supplier identified below generated this SDS using the UL SDS template. UL did not test, certify, or approve the substance described in this SDS, and all information in this SDS was provided by the supplier or was reproduced from publically available regulatory data sources. UL makes no representations or warranties regarding the completeness or accuracy of the information in this SDS and disclaims all liability in connection with the use of this information or the substance described in this SDS. The layout, appearance and format of this SDS is © 2014 UL LLC. All rights reserved.

# 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier** 

Product Name BattNonSpillSams

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Lead Acid (Non-Spillable) Battery

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Name East Penn Mfg.

Supplier Address Deka Rd

Lyon Station

PA 19536 US

Supplier Phone Number Phone:610-682-6361

Fax:610-682-1650

Contact Phone610-682-6361

Supplier Email mgriffith@dekabatteries.com

Emergency telephone number

**Company Emergency Phone** 

610-682-6361

Number .

## 2. HAZARDS IDENTIFICATION

#### Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). This product is an article which is a sealed battery and as such does not require an MSDS per the OSHA hazard communication standard unless ruptured. The hazards indicated are for a ruptured battery.

Acute toxicity - Oral Category 4



Acute toxicity - Inhalation (Vapors)	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 1A
Reproductive Toxicity	Category 1A
Specific target organ toxicity (repeated exposure)	Category 1

## GHS Label elements, including precautionary statements

**Emergency Overview** 

Signal word

**Danger** 

#### Hazard Statements

Harmful if swallowed Harmful if inhaled

Toxic if inhaled

Causes severe skin burns and eye damage

May cause cancer

May damage fertility or the unborn child

Causes damage to organs through prolonged or repeated exposure



. This product is an article which contains a chemical substance. Safety information is given for exposure to the article as sold. Intended use of the product should not result in exposure to the chemical substance. This is a battery. In case of rupture: the above hazards exist.

**Appearance** Colorless

Physical state Solid

**Odor** Odorless

## **Precautionary Statements - Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Do not breathe dust/fume/gas/mist/vapors/spray

#### **Precautionary Statements - Response**

Immediately call a POISON CENTER or doctor/physician

Specific treatment (see supplemental first aid instructions on this label)

#### **Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician

#### Skin

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse

#### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell Immediately call a POISON CENTER or doctor/physician

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Do NOT induce vomiting

#### **Precautionary Statements - Storage**

Store locked up

Store in a well-ventilated place. Keep container tightly closed

#### **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

Not applicable

#### **Unknown Toxicity**

0 % of the mixture consists of ingredient(s) of unknown toxicity

#### Other information

Very toxic to aquatic life with long lasting effects

#### **Interactions with Other Chemicals**

Use of alcoholic beverages may enhance toxic effects.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

.

Chemical name	CAS No	Weight-%	Trade Secret
Lead	7439-92-1	60 - 100	*
Sulfuric acid	7664-93-9	10 - 30	*

<sup>\*</sup>The exact percentage (concentration) of composition has been withheld as a trade secret

## 4. FIRST AID MEASURES

#### First aid measures

**General Advice** First aid is upon rupture of sealed battery.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep

eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present

and easy to do. Continue rinsing. Seek immediate medical attention/advice.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Seek immediate medical attention/advice.

**Inhalation** Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical

attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel

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should) give oxygen. Delayed pulmonary edema may occur. Get medical attention

immediately if symptoms occur.

Ingestion Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water. Never give

anything by mouth to an unconscious person. Call a physician or poison control center

immediately.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. Wear personal protective clothing (see

section 8).

#### Most important symptoms and effects, both acute and delayed

Most Important Symptoms and

Effects

Burning sensation. Coughing and/ or wheezing. Difficulty in breathing. Lead poisoning is characterized by a metallic taste in the mouth, loss of appetite indigestion, nausea, vomiting, constipation, sleep disturbances and overall weakness. Severe exposures can lead to shock, circulatory collapse, and death.

#### Indication of any immediate medical attention and special treatment needed

**Notes to Physician** Product is a corrosive material. Use of gastric lavage or emesis is contraindicated.

Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood

pressure may occur with moist rales, frothy sputum, and high pulse pressure.

#### 5. FIRE-FIGHTING MEASURES

#### **Suitable Extinguishing Media**

Dry chemical. Carbon dioxide (CO2). Water spray.

#### Unsuitable extinguishing media

CAUTION: Use of water spray when fighting fire may be inefficient.

## Specific hazards arising from the chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors.

Uniform Fire Code Toxic: Liquid

Corrosive: Acid-Liquid

**Explosion Data** 

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

## Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

## Personal precautions, protective equipment and emergency procedures

Personal precautions Attention! Corrosive material. Avoid contact with skin, eyes or clothing. Ensure adequate

ventilation. Use personal protective equipment as required. Evacuate personnel to safe

areas. Keep people away from and upwind of spill/leak.

Other Information Refer to protective measures listed in Sections 7 and 8.

**Environmental precautions** 

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Should not be released into the

environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment Absorb or cover with dry earth, sand or other non-combustible material and transfer to

containers.

**Methods for cleaning up**Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

#### Precautions for safe handling

Handling In case of rupture: Handle in accordance with good industrial hygiene and safety practice.

Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash

before reuse.

Conditions for safe storage, including any incompatibilities

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from

moisture. Store locked up. Keep out of the reach of children. Store away from other

materials.

Incompatible Products Acids. Bases. Oxidizing agent.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## **Control parameters**

## **Exposure Guidelines**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Lead	TWA: 0.05 mg/m <sup>3</sup>	TWA: 50 μg/m³ TWA: 50 μg/m³	IDLH: 100 mg/m <sup>3</sup>
7439-92-1		Pb	TWA: 0.050 mg/m <sup>3</sup>
		Action Level: 30 µg/m³ Poison,	
		See 29 CFR 1910.1025 Action	
		Level: 30 µg/m³ Pb Poison, See	
		29 CFR 1910.1025	



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Sulfuric acid	TWA: 0.2 mg/m <sup>3</sup> thoracic fraction	TWA: 1 mg/m <sup>3</sup>	IDLH: 15 mg/m <sup>3</sup>
7664-93-9		(vacated) TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m³

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits NIOSH IDLH Immediately Dangerous to Life or Health

**Other Exposure Guidelines** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962

(11th Cir., 1992)

**Appropriate engineering controls** 

**Engineering Measures** Showers

> Eyewash stations Ventilation systems

Individual protection measures, such as personal protective equipment

Face protection shield. Eye/face protection

Skin and body protection Wear protective gloves and protective clothing. Long sleeved clothing. Chemical resistant

apron. Impervious gloves.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

> respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

> skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended.

Wash hands before breaks and immediately after handling the product. Take off

contaminated clothing and wash before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

#### **Physical and Chemical Properties**

Physical state Colorless **Appearance** Odor Odorless

Color No information available **Odor Threshold** No information available

Property Values Remarks Method

Ha 2 None known None known Melting / freezing point No data available None known Boiling point / boiling range No data available None known No data available Flash Point No data available None known **Evaporation Rate** Flammability (solid, gas) No data available None known

Solid

Flammability Limit in Air

Upper flammability limit No data available No data available Lower flammability limit

Vapor pressure No data available None known Vapor density No data available None known **Specific Gravity** 1.27 None known

**Water Solubility** Immiscible in water None known Solubility in other solvents No data available None known Partition coefficient: n-octanol/water.7 None known

**Autoignition temperature** No data available None known

Decomposition temperatureNo data availableNone knownKinematic viscosityNo data availableNone knownDynamic viscosity26.7None known

**Explosive properties**No data available **Oxidizing properties**No data available

**Other Information** 

Softening Point
VOC Content (%)
Particle Size
No data available
No data available
No data available

**Particle Size Distribution** 

## 10. STABILITY AND REACTIVITY

#### Reactivity

No data available.

#### **Chemical stability**

Stable under recommended storage conditions.

#### **Possibility of Hazardous Reactions**

None under normal processing.

#### Conditions to avoid

Exposure to air or moisture over prolonged periods. Excessive heat.

#### Incompatible materials

Acids. Bases. Oxidizing agent.

#### **Hazardous Decomposition Products**

None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

**Product Information** Product does not present an acute toxicity hazard based on known or supplied information.

In case of rupture:.

**Inhalation** Specific test data for the substance or mixture is not available. Toxic by inhalation.

Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may

cause coughing, choking, headache, dizziness, and weakness for several hours.

Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal. May cause irritation of

respiratory tract.

**Eye contact** Specific test data for the substance or mixture is not available. Causes burns. (based on

components). Corrosive to the eyes and may cause severe damage including blindness.

Causes serious eye damage. May cause irreversible damage to eyes.

**Skin contact** Specific test data for the substance or mixture is not available. Causes burns. (based on

components). Prolonged skin contact causes burns.

**Ingestion** Specific test data for the substance or mixture is not available. Harmful if swallowed.

Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways. Ingestion may cause irritation to mucous membranes. Ingestion may cause

\_\_\_\_\_

gastrointestinal irritation, nausea, vomiting and diarrhea.

#### **Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sulfuric acid 7664-93-9	= 2140 mg/kg (Rat)	-	= 510 mg/m³ (Rat) 2 h

#### Information on toxicological effects

Symptoms Erythema (skin redness). Burning. May cause blindness. Coughing and/ or wheezing.

Difficulty in breathing.

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.

Mutagenic Effects No information available.

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Lead 7439-92-1	А3	Group 2A	Reasonably Anticipated	Х
Sulfuric acid 7664-93-9	A2	Group 1	Known	Х

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity Contains a known or suspected reproductive toxin. Product is or contains a chemical which

is a known or suspected reproductive hazard.

Developmental Toxicity STOT - single exposure

Contains ingredients that have suspected developmental hazards.

No information available.

**STOT - repeated exposure**Causes damage to organs through prolonged or repeated exposure. Based on

classification criteria from the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200), this product has been determined to cause systemic target organ toxicity from

chronic or repeated exposure. (STOT RE).

Chronic Toxicity Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw

necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Effects from this product caused by acute exposure may cause permanent damage to target organs and/or may cause chronic conditions. Contains a known or suspected carcinogen. Possible risk of irreversible effects. Avoid repeated exposure. Prolonged exposure may cause chronic effects. May cause adverse effects on the bone marrow and blood-forming system. Lead compounds may be absorbed by ingestion, by inhalation and through the skin. Lead may damage

kidney function, the blood forming system and the reproductive system.

Target Organ Effects Blood. Central Nervous System (CNS). Eyes. Gastrointestinal tract (GI). Gingival Tissue.

Kidney. Respiratory system. Skin. Teeth. Systemic Toxicity. Reproductive System. May

damage the unborn child.

Aspiration Hazard No information available.

Numerical measures of toxicity Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)
637.00 mg/kg
ATEmix (inhalation-gas)
6,000.00 ppm
ATEmix (inhalation-dust/mist)
0.92 mg/l
ATEmix (inhalation-vapor)
15.00 ATEmix

## 12. ECOLOGICAL INFORMATION

#### **Ecotoxicity**

Very toxic to aquatic life with long lasting effects.

Chemical name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Lead 7439-92-1		96h LC50: = 0.44 mg/L (Cyprinus carpio) 96h LC50: = 1.17 mg/L (Oncorhynchus mykiss) 96h LC50: = 1.32 mg/L (Oncorhynchus mykiss)		48h EC50: = 600 μg/L
Sulfuric acid 7664-93-9		96h LC50: > 500 mg/L (Brachydanio rerio)		24h EC50: = 29 mg/L

## Persistence and Degradability

No information available.

#### **Bioaccumulation**

No information available

## Other adverse effects

No information available.

(UL)

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## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

Disposal methods This material, as supplied, is a hazardous waste according to federal regulations (40 CFR

261).

**Contaminated Packaging** Do not reuse empty containers.

US EPA Waste Number D002 D004 D008

#### California Hazardous Waste Codes 792

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste
Lead	Toxic
7439-92-1	
Sulfuric acid	Toxic
7664-93-9	Corrosive

## 14. TRANSPORT INFORMATION

DOTNOT REGULATEDProper Shipping NameNON REGULATED

Hazard Class N/A

TDG Not regulated

MEX Not regulated

ICAO Not regulated

<u>IATA</u> Not regulated

Proper Shipping Name NON REGULATED

Hazard Class N/A

IMDG/IMO Not regulated

Hazard Class N/A

RID Not regulated

ADR Not regulated

ADN Not regulated

## 15. REGULATORY INFORMATION

## International Inventories

TSCA Complies

DSL All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List



## **US Federal Regulations**

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS No	Weight-%	SARA 313 - Threshold Values %
Lead - 7439-92-1	7439-92-1	60 - 100	0.1
Sulfuric acid - 7664-93-9	7664-93-9	10 - 30	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

## **CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Lead 7439-92-1		X	X	
Sulfuric acid 7664-93-9	1000 lb			Х

## CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	<b>Extremely Hazardous Substances</b>	RQ
		RQs	
Lead 7439-92-1	10 lb		RQ 10 lb final RQ RQ 4.54 kg final RQ
Sulfuric acid 7664-93-9	1000 lb	1000 lb	RQ 1000 lb final RQ RQ 454 kg final RQ

## **US State Regulations**

## **California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical name	California Proposition 65
Lead - 7439-92-1	Carcinogen
	Developmental
	Female Reproductive
	Male Reproductive
Sulfuric acid - 7664-93-9	Carcinogen
Arsenic - 7440-38-2	Carcinogen

## U.S. State Right-to-Know Regulations

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Chemical name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Lead 7439-92-1	Х	X	X	Х	Х
Sulfuric acid 7664-93-9	Х	Х	Х	Х	Х
Antimony 7440-36-0	Х	Х	Х	Х	Х
Arsenic	X	X	X	X	X



7440-38-2			

## International Regulations

#### Mexico

National occupational exposure limits

Component	Carcinogen Status	Exposure Limits
Lead 7439-92-1 ( 60 - 100 )	A3	Mexico: TWA= 0.15 mg/m <sup>3</sup>
Sulfuric acid 7664-93-9 ( 10 - 30 )	A2	Mexico: TWA 1 mg/m <sup>3</sup>

A2 - Suspected Human Carcinogen
A3 - Confirmed Animal Carcinogen

Mexico - Occupational Exposure Limits - Carcinogens

#### Canada

**WHMIS Hazard Class** 

Non-controlled

## **16. OTHER INFORMATION**

NFPA Health Hazards 3 Flammability 0 Instability 0 Physical and Chemical Hazards -

HMIS Health Hazards 0 Flammability 0 Physical Hazard 0 Personal Protection

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#### **Disclaimer**

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## **End of Safety Data Sheet**