Issuing Date 24-Jun-2015 Revision Date 24-Jun-2015 Revision Number 2

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

Product identifier

Product Name LR03

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Alkaline battery

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Name Hi-Watt Battery Industry Co.,Ltd.

Supplier Address 21Tung Yuen Street, Yau Tong Bay, Kowloon, Hong Kong

Hong Kong Hong Kong 254678 HK

Supplier Phone Number Phone:852-2348 0111

Fax:852-2772 7703

Contact Phone852-2348 0111

Supplier Email frank.wang@hi-watt.com.hk

Emergency telephone number

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

| Acute toxicity - Oral | Category 4 |
|---|---------------------------|
| Acute toxicity - Inhalation (Gases) | Category 4 |
| Acute toxicity - Inhalation (Dusts/Mists) | Category 4 |
| Skin corrosion/irritation | Category 1 Sub-category A |



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| Serious eye damage/eye irritation | Category 1 |
|--|------------|
| Specific target organ toxicity (repeated exposure) | Category 2 |

GHS Label elements, including precautionary statements

Emergency Overview

Signal word

Danger

Hazard Statements

Harmful if swallowed Harmful if inhaled

Causes severe skin burns and eye damage

May cause 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 Metallic

Physical state Solid

Odor No information available

Precautionary Statements - Prevention

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

Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician

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

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

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

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Unknown Toxicity

4.53% 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 |
|---------------------|-----------|----------|--------------|
| Manganese dioxide | 1313-13-9 | 15 - 40 | * |
| Iron | 7439-89-6 | 10 - 30 | * |
| Zinc | 7440-66-6 | 10 - 30 | * |
| Potassium hydroxide | 1310-58-3 | 5 - 10 | * |
| Carbon | 7440-44-0 | 1 - 5 | * |
| Copper | 7440-50-8 | 1 - 5 | * |
| Polystyrene | 9003-53-6 | 1 - 5 | * |
| Zinc oxide | 1314-13-2 | 0.1 - 1 | * |

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret

4. FIRST AID MEASURES

First aid measures

General Advice This is a battery. In case of rupture:. Immediate medical attention is required.

Show this safety data sheet to the doctor in attendance.

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. Seek immediate medical attention/advice. Remove contact lenses, if present and easy

to do. Continue rinsing.

Skin contact Immediate medical attention is required. Wash off immediately with soap and

plenty of water while removing all contaminated clothes and shoes.

Inhalation Remove to fresh air. If symptoms persist, call a physician. If breathing has

stopped, give artificial respiration. Get medical attention immediately. If not breathing, give artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get medical attention



immediately if symptoms occur. Do not breathe dust.

Ingestion Do NOT induce vomiting. Rinse mouth. 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). Do not breathe dust.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and Burning sensation. Coughing and/ or wheezing. Difficulty in breathing. **Effects**

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically. 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

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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 Irritant: Solid

Toxic: Solid

Oxidizer: Class 1--Solid

Hazardous Combustion Products

Carbon oxides.

Explosion Data

Sensitivity to Mechanical Impact No.

Sensitivity to Static Discharge No.

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. Avoid generation of dust. Do not

breathe dust.

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

Environmental precautions

Environmental precautions Refer to protective measures listed in Sections 7 and 8. 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 Prevent further leakage or spillage if safe to do so.

Methods for cleaning up 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. Do not breathe dust. Avoid generation of dust.

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 |
|--------------------------------|---|---|---|
| Manganese dioxide 1313-13-9 | TWA: 0.02 mg/m³ Mn TWA: 0.1 mg/m³ Mn | (vacated) Ceiling: 5 mg/m³ Ceiling: 5 mg/m³ Mn | IDLH: 500 mg/m³ Mn TWA: 1 mg/m³ Mn STEL: 3 mg/m³ Mn |
| Zinc 7440-66-6 | STEL: 10 mg/m³ respirable fraction | TWA: 5 mg/m³ fume TWA: 15 mg/m³ total dust | IDLH: 500 mg/m ³ Ceiling: 15 mg/m ³ dust |



| | TWA: 2 mg/m³ respirable fraction | TWA: 5 mg/m³ respirable fraction | TWA: 5 mg/m³ dust and fume STEL: 10 mg/m³ fume |
|----------------------------------|---|---|---|
| Potassium hydroxide 1310-58-3 | Ceiling: 2 mg/m ³ | (vacated) Ceiling: 2 mg/m ³ | Ceiling: 2 mg/m ³ |
| Copper 7440-50-8 | TWA: 0.2 mg/m³ fume TWA: 1 mg/m³ Cu dust and mist | TWA: 0.1 mg/m³ fume TWA: 1 mg/m³ dust and mist (vacated) TWA: 0.1 mg/m³ Cu dust, fume, mist | IDLH: 100 mg/m³ dust, fume and mist TWA: 1 mg/m³ dust and mist TWA: 0.1 mg/m³ fume |
| Zinc oxide 1314-13-2 | STEL: 10 mg/m³ respirable fraction TWA: 2 mg/m³ respirable fraction | TWA: 5 mg/m³ fume TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction (vacated) TWA: 5 mg/m³ fume (vacated) TWA: 10 mg/m³ total dust (vacated) TWA: 5 mg/m³ respirable fraction (vacated) STEL: 10 mg/m³ fume | IDLH: 500 mg/m³ Ceiling: 15 mg/m³ dust TWA: 5 mg/m³ dust and fume STEL: 10 mg/m³ fume |

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) See section 15 for national exposure control parameters

Appropriate engineering controls

Engineering Measures Showers

Eyewash stations Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection None required for consumer use. If there is a risk of contact:. Face protection shield.

Skin and body protectionNone required for consumer use. If there is a risk of contact:. Wear protective gloves and

protective clothing. Long sleeved clothing. Chemical resistant apron. Impervious gloves.

Respiratory protectionNo protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or

smoke when using this product. Take off contaminated clothing and wash before reuse. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. 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. For environmental protection, remove and wash all

contaminated protective equipment before re-use. Do not breathe dust.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical state Solid Appearance Metallic

AppearanceMetallicOdorNo information availableColorNo information availableOdor ThresholdNo information available

<u>Property</u> <u>Values</u> <u>Remarks Method</u>

pHNo data availableNone knownMelting / freezing pointNo data availableNone knownBoiling point / boiling rangeNo data availableNone knownFlash PointNo data availableNone known



Evaporation RateNo data availableNone knownFlammability (solid, gas)No data availableNone known

Flammability Limit in Air

Upper flammability limit
Lower flammability limit
Vapor pressure
Vapor density

No data available
No data available
No data available

Vapor density No data available **Specific Gravity** No data available Water Solubility Immiscible in water Solubility in other solvents No data available Partition coefficient: n-octanol/waterNo data available **Autoignition temperature** No data available No data available **Decomposition temperature** Kinematic viscosity No data available **Dynamic viscosity** No data available No data available **Explosive properties Oxidizing properties** No data available

None known None known

None known

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.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to avoid

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

Incompatible materials

Acids. Bases. Oxidizing agent.

Hazardous Decomposition Products

Carbon oxides.

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. 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. Harmful by



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inhalation.

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. Corrosive. (based on

components). Causes burns.

IngestionSpecific test data for the substance or mixture is not available. Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May

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. May be harmful if swallowed.

Component Information

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|----------------------------------|----------------------|-------------|-----------------|
| Manganese dioxide 1313-13-9 | = 9000 mg/kg (Rat) | - | - |
| Iron 7439-89-6 | = 984 mg/kg (Rat) | - | - |
| Potassium hydroxide 1310-58-3 | = 214 mg/kg (Rat) | - | - |
| Carbon 7440-44-0 | > 10000 mg/kg (Rat) | - | - |
| Zinc oxide 1314-13-2 | > 5000 mg/kg (Rat) | - | - |

Information on toxicological effects

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

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

Sensitization May cause sensitization of susceptible persons.

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 |
|---------------|-------|---------|-----|------|
| Polystyrene | | Group 3 | | |
| 9003-53-6 | | | | |

IARC (International Agency for Research on Cancer) Group 3 - Not Classifiable as to Carcinogenicity in Humans

Reproductive toxicity No information available.

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

No information available.

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).





STOT - single exposure

Chronic Toxicity

No known effect based on information supplied. 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. Avoid repeated exposure. Prolonged exposure may cause chronic effects. May cause adverse effects on the bone marrow and blood-forming system. May cause

adverse liver effects. Carcinogenic potential is unknown.

Target Organ Effects Respiratory system. Eyes. Skin. Gastrointestinal tract (GI). Blood. Central Nervous System

(CNS). Central Vascular System (CVS). Kidney. Liver. Cardiovascular system.

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)
861.00 mg/kg
ATEmix (inhalation-gas)
12,500.00 ppm (4 hr)
ATEmix (inhalation-dust/mist)
4.20 mg/l
ATEmix (inhalation-vapor)
31.00 ATEmix



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12. ECOLOGICAL INFORMATION

This product contains a chemical which is listed as a severe marine pollutant according to DOT

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) |
|---------------------|---|---|-------------------------------|---------------------------------|
| Iron | | 96h LC50: = 13.6 mg/L | | |
| 7439-89-6 | | (Morone saxatilis) | | |
| Zinc 7440-66-6 | 96h EC50: 0.11 - 0.271 mg/L (Pseudokirchneriella subcapitata) 72h EC50: 0.09 - 0.125 mg/L (Pseudokirchneriella subcapitata) | 96h LC50: 2.16 - 3.05 mg/L (Pimephales promelas) 96h LC50: 0.211 - 0.269 mg/L (Pimephales promelas) 96h LC50: = 2.66 mg/L (Pimephales promelas) 96h LC50: = 30 mg/L (Cyprinus carpio) 96h LC50: = 0.45 mg/L (Cyprinus carpio) 96h LC50: = 7.8 mg/L (Cyprinus carpio) 96h LC50: = 3.5 mg/L (Lepomis macrochirus) 96h LC50: = 0.24 mg/L (Oncorhynchus mykiss) 96h LC50: = 0.59 mg/L (Oncorhynchus mykiss) 96h LC50: = 0.41 mg/L | | 48h EC50: 0.139 - 0.908 mg/L |
| Potassium hydroxide | | (Oncorhynchus mykiss) 96h LC50: = 80 mg/L | | |
| 1310-58-3 | | (Gambusia affinis) | | |
| Copper 7440-50-8 | subcapitata) 72h EC50: 0.0426 - 0.0535 mg/L (Pseudokirchneriella subcapitata) | 96h LC50: 0.0068 - 0.0156 mg/L (Pimephales promelas) 96h LC50: = 0.112 mg/L (Poecilia reticulata) 96h LC50: = 0.3 mg/L (Cyprinus carpio) 96h LC50: = 0.8 mg/L (Cyprinus carpio) 96h LC50: = 1.25 mg/L (Lepomis macrochirus) 96h LC50: = 0.052 mg/L (Oncorhynchus mykiss) 96h LC50: = 0.2 mg/L (Pimephales promelas) 96h LC50: < 0.3 mg/L (Pimephales promelas) | | 48h EC50: = 0.03 mg/L |

Persistence and Degradability

No information available.

Bioaccumulation

| Chemical Name | Log Pow |
|----------------------------------|---------|
| Manganese dioxide 1313-13-9 | <0 |
| Potassium hydroxide 1310-58-3 | 0.83 |

Other adverse effects

No information available.



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13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal methods This material, as supplied, is not a hazardous waste according to Federal regulations (40

CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local

regulations for additional requirements.

Contaminated PackagingDispose of contents/containers in accordance with local regulations.

California Hazardous Waste Codes 181

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

| Chemical Name | California Hazardous Waste |
|----------------------------------|----------------------------|
| Zinc 7440-66-6 | Ignitable powder Toxic |
| Potassium hydroxide 1310-58-3 | Toxic Corrosive |
| Copper 7440-50-8 | Toxic |
| Zinc oxide 1314-13-2 | Toxic |

14. TRANSPORT INFORMATION

DOTNOT REGULATEDProper Shipping NameNON REGULATED

Hazard Class N/A

Marine Pollutant This product contains a chemical which is listed as a severe marine pollutant according to

DOT

TDG Not regulated

Marine Pollutant This product contains a chemical which is listed as a severe marine pollutant according to

TDG.

MEX Not regulated

ICAO Not regulated

ATA Not regulated

Proper Shipping Name NON REGULATED

Hazard Class N/A

<u>IMDG/IMO</u> Not regulated

Hazard Class N/A

<u>RID</u> 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 % |
|-------------------------------|-----------|----------|----------------------------------|
| Manganese dioxide - 1313-13-9 | 1313-13-9 | 15 - 40 | 1.0 |
| Zinc - 7440-66-6 | 7440-66-6 | 10 - 30 | 1.0 |
| Copper - 7440-50-8 | 7440-50-8 | 1 - 5 | 1.0 |
| Zinc oxide - 1314-13-2 | 1314-13-2 | 0.1 - 1 | 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 |
|----------------------------------|--------------------------------|------------------------|---------------------------|-------------------------------|
| Zinc 7440-66-6 | | X | X | |
| Potassium hydroxide 1310-58-3 | 1000 lb | | | Х |
| Copper 7440-50-8 | | X | X | |
| Zinc oxide 1314-13-2 | | X | | |

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 | Extremely Hazardous Substances RQs | RQ |
|----------------------------------|--------------------------|------------------------------------|--|
| Zinc 7440-66-6 | 1000 lb | | RQ 454 kg final RQ RQ 1000 lb final RQ |
| Potassium hydroxide 1310-58-3 | 1000 lb | | RQ 1000 lb final RQ RQ 454 kg final RQ |
| Copper 7440-50-8 | 5000 lb | | RQ 5000 lb final RQ RQ 2270 kg final RQ |

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

| Chemical Name | California Proposition 65 |
|---------------|---------------------------|
|---------------|---------------------------|



| Cellulose - 9004-34-6 | - |
|-----------------------|---|

U.S. State Right-to-Know Regulations

.

| Chemical Name | New Jersey | Massachusetts | Pennsylvania | Rhode Island | Illinois |
|----------------------------------|------------|---------------|--------------|--------------|----------|
| Manganese dioxide 1313-13-9 | | | Х | Х | Х |
| Zinc 7440-66-6 | X | Х | Х | Х | |
| Potassium hydroxide 1310-58-3 | Х | Х | Х | Х | |
| Carbon 7440-44-0 | | | Х | | |
| Copper 7440-50-8 | Х | Х | Х | Х | Х |
| Cellulose 9004-34-6 | Х | Х | Х | - | Х |
| Zinc oxide 1314-13-2 | Х | Х | Х | Х | |

International Regulations

Mexico

National occupational exposure limits

| Component | Carcinogen Status | Exposure Limits |
|--|-------------------|---|
| Manganese dioxide 1313-13-9 (15 - 40) | | Mexico: TWA= 0.2 mg/m ³ |
| Carbon 7440-44-0 (1 - 5) | | Mexico: TWA 2 mg/m ³ |
| Copper 7440-50-8 (1 - 5) | | Mexico: TWA= 1 mg/m³ Mexico: TWA= 0.2 mg/m³ Mexico: STEL= 2 mg/m³ |
| Zinc oxide 1314-13-2 (0.1 - 1) | | Mexico: TWA 5 mg/m³ Mexico: TWA 10 mg/m³ Mexico: STEL 10 mg/m³ |

Mexico - Occupational Exposure Limits - Carcinogens

Canada

WHMIS Hazard Class

Not determined

16. OTHER INFORMATION

NFPA Health Hazards 0 Flammability 0 Instability 0 Physical and Chemical Hazards - HMIS Health Hazards 0 Flammability 0 Physical Hazard 0 Personal Protection

Prepared By Product Stewardship

23 British American Blvd. Latham, NY 12110 1-800-572-6501 24-Jun-2015

Issuing Date24-Jun-2015Revision Date24-Jun-2015

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



