# SAFETY DATA SHEET

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

**Product identifier** 

Product Name NI-MH AA1800mAh 4.8V

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Nickel Metal Hydride (NiMH) Battery

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Name Guangdong TianQiu Electronics Technology Co.,Ltd.

**Supplier Address** 9/F TianQiu Building No.16-30, He Yi Rd., San Yuan Li Ave., GuangZhou China

GUANGZHOU GUANDONG 510410 CN

Supplier Phone Number Phone:8620-36322277

Fax:8620-36322277

Supplier Email tq.cosong@163.com

Emergency telephone number

**Company Emergency Phone** 

Number

8620-13825131170

#### 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 (Dusts/Mists)	Category 4

(UL)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Respiratory sensitization	Category 1
Skin sensitization	Category 1
Germ cell mutagenicity	Category 2
Carcinogenicity	Category 1A
Reproductive Toxicity	Category 1B
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

Causes skin irritation

Causes serious eye damage

May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause an allergic skin reaction

Suspected of causing genetic defects

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.

AppearanceNo information availablePhysical stateSolidOdorNo information available

# **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

In case of inadequate ventilation wear respiratory protection

Contaminated work clothing should not be allowed out of the workplace

Wear protective gloves

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

# **Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention

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: Wash with plenty of soap and water Take off contaminated clothing and wash before reuse If skin irritation or rash occurs: Get medical advice/attention

#### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

#### Ingestion

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

#### **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**

22.2594 % of the mixture consists of ingredient(s) of unknown toxicity

#### Other information

Very toxic to aquatic life with long lasting effects

Repeated or prolonged skin contact may cause allergic reactions with susceptible persons

#### **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
Nickel hydroxide	12054-48-7	10 - 30	*
Nickel	7440-02-0	10 - 30	*
Iron	7439-89-6	5 - 10	*
Cobalt	7440-48-4	3 - 7	*
PVC (Chloroethylene, polymer)	9002-86-2	3 - 7	*
Cobalt(II) oxide	1307-96-6	1 - 5	*
Manganese	7439-96-5	1 - 5	*
Potassium hydroxide	1310-58-3	1 - 5	*
Sodium hydroxide	1310-73-2	1 - 5	*
Copper	7440-50-8	0.1 - 1	*

<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. Remove contact lenses, if present and easy to do. Continue

rinsing. Do not rub affected area. Seek immediate medical attention/advice.

**Skin contact** Wash off immediately with soap and plenty of water for at least 15 minutes. May cause an

allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.

**Inhalation** Remove to fresh air. May cause allergic respiratory reaction. If breathing has stopped, give

artificial respiration. Get medical attention immediately. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Get medical attention immediately if symptoms

occur.

**Ingestion** Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an

unconscious person. Do NOT induce vomiting. May produce an allergic reaction. If an allergic reaction occurs, stop use and seek medical help right away. Call a physician or

poison control center immediately.

**Self-protection of the first aider** Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

Wear personal protective clothing (see section 8). Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth

resuscitation.

Most important symptoms and effects, both acute and delayed

**Most Important Symptoms and** 

**Effects** 

Burning sensation. Coughing and/ or wheezing. Difficulty in breathing. Itching. Rashes.

Hives. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Indication of any immediate medical attention and special treatment needed

Notes to Physician May cause sensitization in susceptible persons. Treat symptomatically.

#### 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

Product is or contains a sensitizer. May cause sensitization by skin contact. May cause sensitization by inhalation and skin contact.

#### **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** 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.

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. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up.

Keep out of the reach of children.

**Incompatible Products** Strong acids. Strong oxidizing agents. Strong bases.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Control parameters**

#### **Exposure Guidelines**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Nickel hydroxide	TWA: 0.2 mg/m <sup>3</sup> Ni inhalable fraction	TWA: 1 mg/m³ Ni	IDLH: 10 mg/m <sup>3</sup> Ni
12054-48-7		(vacated) TWA: 1 mg/m³ Ni	TWA: 0.015 mg/m³ except Nickel
			carbonyl Ni
Nickel	TWA: 1.5 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>	IDLH: 10 mg/m <sup>3</sup>
7440-02-0		(vacated) TWA: 1 mg/m <sup>3</sup>	TWA: 0.015 mg/m <sup>3</sup>
Cobalt	TWA: 0.02 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup> dust and fume	IDLH: 20 mg/m <sup>3</sup> dust and fume
7440-48-4		(vacated) TWA: 0.05 mg/m <sup>3</sup> dust and	TWA: 0.05 mg/m <sup>3</sup> dust and fume
		fume	
PVC (Chloroethylene,	TWA: 1 mg/m <sup>3</sup> respirable fraction	-	
polymer)			



9002-86-2			
Cobalt(II) oxide 1307-96-6	TWA: 0.02 mg/m <sup>3</sup> Co	-	
Manganese 7439-96-5	TWA: 0.02 mg/m³ respirable fraction TWA: 0.1 mg/m³ inhalable fraction TWA: 0.02 mg/m³ Mn respirable fraction TWA: 0.1 mg/m³ Mn inhalable fraction	(vacated) TWA: 1 mg/m³ fume (vacated) STEL: 3 mg/m³ fume (vacated) Ceiling: 5 mg/m³ Ceiling: 5 mg/m³ fume Ceiling: 5 mg/m³ Mn	IDLH: 500 mg/m³ TWA: 1 mg/m³ fume STEL: 3 mg/m³
Potassium hydroxide 1310-58-3	Ceiling: 2 mg/m <sup>3</sup>	(vacated) Ceiling: 2 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>
Sodium hydroxide 1310-73-2	Ceiling: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup> (vacated) Ceiling: 2 mg/m <sup>3</sup>	IDLH: 10 mg/m <sup>3</sup> Ceiling: 2 mg/m <sup>3</sup>
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

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 Hexavalent Chrome may be formed during welding 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

**Eye/face protection** Tight sealing safety goggles.

**Skin and body protection** Wear protective gloves and protective clothing. Long sleeved clothing. 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.

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. Take off contaminated clothing and wash before reuse.

Wash hands before breaks and immediately after handling the product.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

#### **Physical and Chemical Properties**

Physical state Solid

AppearanceNo information availableOdorNo information availableColorNo information availableOdor ThresholdNo information available

Property Values Remarks Method

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



Flammability (solid, gas) No data available None known
Flammability Limit in Air
Upper flammability limit No data available

Lower flammability limit No data available Vapor pressure No data available None known Vapor density No data available None known **Specific Gravity** No data available None known Water Solubility No data available None known Solubility in other solvents None known No data available Partition coefficient: n-octanol/waterNo data available None known No data available None known Autoignition temperature No data available None known **Decomposition temperature** Kinematic viscosity No data available None known No data available None known

Dynamic viscosityNo data availableExplosive propertiesNo data availableOxidizing propertiesNo data available

**Other Information** 

Softening PointNo data availableVOC Content (%)No data availableParticle SizeNo 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

Excessive heat.

#### **Incompatible materials**

Strong acids. Strong oxidizing agents. Strong bases.

### **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. May cause irritation of

respiratory tract. Harmful by inhalation. (based on components). May cause allergy or



asthma symptoms or breathing difficulties if inhaled. May cause sensitization in susceptible

persons.

**Eye contact** Specific test data for the substance or mixture is not available. Causes serious eye

damage. (based on components). Severely irritating to eyes. May cause irreversible

damage to eyes.

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

on components). Prolonged contact may cause redness and irritation. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

**Ingestion** Specific test data for the substance or mixture is not available. Ingestion may cause

irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Harmful if swallowed. (based on components). May cause additional

affects as listed under "Inhalation".

#### **Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Nickel hydroxide 12054-48-7	= 1515 mg/kg ( Rat )	> 2 g/kg (Rat)	= 1200 mg/m³ (Rat) 4 h
Nickel 7440-02-0	> 9000 mg/kg (Rat)	-	-
Iron 7439-89-6	= 984 mg/kg ( Rat )	-	-
Cobalt 7440-48-4	= 6171 mg/kg (Rat)	-	> 10 mg/L (Rat) 1 h
Cobalt(II) oxide 1307-96-6	= 159 mg/kg (Rat) = 202 mg/kg ( Rat)	-	-
Manganese 7439-96-5	= 9 g/kg ( Rat )	-	-
Potassium hydroxide 1310-58-3	= 284 mg/kg(Rat)	-	-
Sodium hydroxide 1310-73-2	-	= 1350 mg/kg ( Rabbit )	-

#### Information on toxicological effects

**Symptoms** Erythema (skin redness). May cause redness and tearing of the eyes. May cause

blindness. Burning. Coughing and/ or wheezing. Itching. Rashes. Hives. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands

and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing.

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

**Sensitization** May cause sensitization by skin contact. May cause sensitization by inhalation.

Mutagenic Effects Contains a known or suspected mutagen.

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

Chemical name	ACGIH	IARC	NTP	OSHA
Nickel hydroxide 12054-48-7	A1	Group 1	Known	Х
Nickel 7440-02-0		Group 2B	Reasonably Anticipated	Х
Cobalt 7440-48-4	А3	Group 2B	Reasonably Anticipated	Х
PVC (Chloroethylene, polymer)		Group 3		



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9002-86-2			
Cobalt(II) oxide	A3	Group 2B	X
1307-96-6			

ACGIH (American Conference of Governmental Industrial Hygienists)

A1 - Known Human Carcinogen

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in 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.

STOT - single exposure 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).

Prolonged exposure may cause chronic effects. Repeated contact may cause allergic **Chronic Toxicity** 

> reactions in very susceptible persons. Contains a known or suspected mutagen. Possible risk of irreversible effects. Contains a known or suspected carcinogen. Contains a known or suspected reproductive toxin. Avoid repeated exposure. May cause adverse effects on the bone marrow and blood-forming system. May cause adverse liver effects. Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization of

susceptible persons.

**Target Organ Effects** Respiratory system. Eyes. Skin. May affect the genetic material in germ cells (sperm and

eggs). Gastrointestinal tract (GI). Reproductive System. Blood. Central Nervous System

(CNS). Kidney. Lungs. Nasal cavities. Heart. Liver.

No information available. **Aspiration Hazard** 

Numerical measures of toxicity Product Information

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

ATEmix (oral) 1,771.00 mg/kg ATEmix (dermal) 53,519.00 mg/kg ATEmix (inhalation-gas) 12,306.00 ppm

ATEmix (inhalation-dust/mist)

4.10 mg/l

**ATEmix (inhalation-vapor)** 

30.08 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)
Nickel	72h EC50: = 0.18 mg/L	96h LC50: > 100 mg/L		48h EC50: > 100 mg/L 48h
7440-02-0	(Pseudokirchneriella	(Brachydanio rerio) 96h		EC50: = 1 mg/L
	subcapitata) 96h EC50:	LC50: = 1.3 mg/L (Cyprinus		j i
	0.174 - 0.311 mg/L	carpio) 96h LC50: = 10.4		
	(Pseudokirchneriella	mg/L (Cyprinus carpio)		
	subcapitata)			
Iron		96h LC50: = 13.6 mg/L		
7439-89-6		(Morone saxatilis)		
Cobalt		96h LC50: > 100 mg/L		
7440-48-4		(Brachydanio rerio)		
Potassium hydroxide		96h LC50: = 80 mg/L		
1310-58-3		(Gambusia affinis)		
Sodium hydroxide		96h LC50: = 45.4 mg/L		
1310-73-2		(Oncorhynchus mykiss)		
Copper	96h EC50: 0.031 - 0.054	96h LC50: 0.0068 - 0.0156		48h EC50: = 0.03 mg/L
7440-50-8	mg/L (Pseudokirchneriella	mg/L (Pimephales promelas)		
	subcapitata) 72h EC50:	96h LC50: = 1.25 mg/L		
	0.0426 - 0.0535 mg/L	(Lepomis macrochirus) 96h		
	(Pseudokirchneriella	LC50: = 0.052 mg/L		
	subcapitata)	(Oncorhynchus mykiss) 96h		
		LC50: = 0.2 mg/L		
		(Pimephales promelas) 96h		
		LC50: < 0.3 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)		

# Persistence and Degradability

No information available.

# **Bioaccumulation**

Chemical name	Log Pow
Potassium hydroxide	0.65
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 a hazardous waste according to federal regulations (40 CFR

261).

**Contaminated Packaging** Dispose of contents/containers in accordance with local regulations.

US EPA Waste Number D007

### California Hazardous Waste Codes 141

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

Chemical name	California Hazardous Waste
Nickel	Toxic powder
7440-02-0	Ignitable powder
Cobalt	Toxic powder
7440-48-4	Ignitable powder Toxic
Cobalt(II) oxide	Toxic
1307-96-6	
Manganese	Ignitable powder
7439-96-5	
Potassium hydroxide	Toxic
1310-58-3	Corrosive
Sodium hydroxide	Toxic
1310-73-2	Corrosive
Copper	Toxic
7440-50-8	

# 14. TRANSPORT INFORMATION

 DOT
 NOT REGULATED

 Proper Shipping Name
 NON 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

Marine Pollutant Product is a marine pollutant according to the criteria set by IMDG/IMO

RID Not regulated

ADR Not regulated

ADN Not regulated



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# 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 %
Nickel hydroxide - 12054-48-7	12054-48-7	10 - 30	0.1
Nickel - 7440-02-0	7440-02-0	10 - 30	0.1
Cobalt - 7440-48-4	7440-48-4	3 - 7	0.1
Cobalt(II) oxide - 1307-96-6	1307-96-6	1 - 5	0.1
Manganese - 7439-96-5	7439-96-5	1 - 5	1.0
Copper - 7440-50-8	7440-50-8	0.1 - 1	1.0

### SARA 311/312 Hazard Categories

Acute Health HazardNoChronic Health HazardNoFire HazardNoSudden release of pressure hazardNoReactive HazardNo

#### **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
Nickel hydroxide 12054-48-7		Х		X
Nickel 7440-02-0		Х	X	
Potassium hydroxide 1310-58-3	1000 lb			X
Sodium hydroxide 1310-73-2	1000 lb			Х
Copper 7440-50-8		Х	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
Nickel hydroxide 12054-48-7	10 lb		RQ 10 lb final RQ RQ 4.54 kg final RQ
Nickel 7440-02-0	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ
Potassium hydroxide 1310-58-3	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ
Sodium hydroxide	1000 lb		RQ 1000 lb final RQ



1310-73-2		RQ 454 kg final RQ
Copper	5000 lb	RQ 5000 lb final RQ
7440-50-8		RQ 2270 kg final RQ

# **US State Regulations**

<u>California Proposition 65</u>
This product contains the following Proposition 65 chemicals.

Chemical name	California Proposition 65	
Nickel hydroxide - 12054-48-7	Carcinogen	
Nickel - 7440-02-0	Carcinogen	
Cobalt - 7440-48-4	Carcinogen	
Cobalt(II) oxide - 1307-96-6	Carcinogen	
Antimony trioxide - 1309-64-4	Carcinogen	

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

Chemical name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Nickel hydroxide 12054-48-7	Х	X	Х	Х	Χ
Nickel 7440-02-0	Х	Х	Х	Х	Χ
Cerium 7440-45-1	Х				
Cobalt 7440-48-4	Х	Х	Х	Х	Х
PVC (Chloroethylene, polymer) 9002-86-2	Х				
Cobalt(II) oxide 1307-96-6	Х		Х	Х	Х
Manganese 7439-96-5	Х	Х	Х	Х	Х
Potassium hydroxide 1310-58-3	Х	Х	Х	Х	
Sodium hydroxide 1310-73-2	Х	Х	Х	Х	
Aluminum 7429-90-5	Х	Х	Х	Х	

# **International Regulations**

#### Mexico

National occupational exposure limits

Chemical name	Carcinogen Status	Exposure Limits
Nickel hydroxide		Mexico: TWA= 0.1 mg/m <sup>3</sup>
•		Mexico: STEL= 0.3 mg/m <sup>3</sup>
Nickel		Mexico: TWA 1 mg/m <sup>3</sup>
Cobalt	A3	Mexico: TWA= 0.1 mg/m <sup>3</sup>
Manganese		Mexico: TWA 0.2 mg/m <sup>3</sup>
-		Mexico: TWA 1 mg/m <sup>3</sup>
		Mexico: STEL 3 mg/m <sup>3</sup>
Sodium hydroxide		Mexico: Ceiling 2 mg/m <sup>3</sup>
Copper		Mexico: TWA= 1 mg/m <sup>3</sup>
		Mexico: TWA= 0.2 mg/m <sup>3</sup>
		Mexico: STEL= 2 mg/m <sup>3</sup>

A3 - Confirmed Animal Carcinogen

Mexico - Occupational Exposure Limits - Carcinogens

Canada

**WHMIS Hazard Class** 

Non-controlled



# **16. OTHER INFORMATION**

NFPA Health Hazards 1 Flammability 0 Instability 0 Physical and

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** 



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