

SAFETY DATA SHEET

Report No.: CMC231219029M01

Name of sample: 1.5V Alkaline Battery

Model: LR20, LR14, LR6, LR03, LR8D425, LR1, 6LR61, LR521, LR12

Type: 1.5V 1100mAh

Client: Dongguan Nuoxing Electronics Co.,Ltd

Address: 12th Floor, Building 14, Golden Town, No. 7 Science and Technology Avenue, Houjie Town, Dongguan City

Written: Riley Xiao

Approved: Dong Li

Reviewed: Dylan Dou

Date of issue: 2024.01.08

Seal of CMC:



CMC Testing International (Shenzhen) Co., Ltd.

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Safety Data Sheet

Section 1- Identification of the Substance/Preparation and of the Company/Undertaking

(a) Product identifier

Name of Sample	1.5V Alkaline Battery	Weight	10.8g
		Size (D×H)	(10.3×44.0)mm
Model	LR03		

(b) Other means of identification

Synonyms: None

(c) Recommended use of the chemical and restrictions on use

Recommended use: ALKALINE BATTERIES

Restriction on use: No information available

(d) Details of the supplier of the product

Manufacturer	Dongguan Nuoxing Electronics Co.,Ltd
Manufacturer's Address	12th Floor, Building 14, Golden Town, No. 7 Science and Technology Avenue, Houjie Town, Dongguan City
Contact Person	Mr.Feng
E-mail	feng@nuoxingdz.com
Telephone:	+86-769-85991992
Fax:	+86-769-85889734
(e) Emergency phone number	+86-769-85991992

Section 2- Hazards Identification

(a) 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
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

(b) GHS Label elements, including precautionary statements
Emergency Overview
Signal word: Danger

Hazard Statements

Harmful if swallowed

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



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.

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
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	<p>IF EXPOSED OR CONNECTED: Get medical advice/attention. Specific treatment (see supplemental first aid/instruction on this label).</p> <p>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.</p> <p>IF ON 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</p> <p>IF INHALATION: If breathing is difficult, 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.</p> <p>IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell Rinse mouth.</p>
Precautionary Statements-Storage	Store locked up
Precautionary Statements-Disposal	Dispose of contents/container to an approved waste disposal plant
(c) Hazards not otherwise classified (HNOC)	Not applicable
(d) Unknown Toxicity	8.14964% of the mixture consists of ingredient(s) of unknown toxicity
(e) Other information	Very toxic to aquatic life with long lasting effects; Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.
(f) Interactions with Other Chemicals	No information available.

Section 3- Composition/Information on Ingredients

Chemical Name	CAS Number	Weight-%	Trade Secret
Manganese dioxide	1313-13-9	33	*
Iron	7439-89-6	21	*
Graphite	7782-42-5	3.5	*
Potassium hydroxide	1310-58-3	7.5	*
Zinc	7440-66-6	15	*
Zinc oxide	1314-13-2	4	*
Indium hydroxide	20661-21-6	3	*
Poly[imino-1,6-hexanediylimino(1,9-dioxo-1,9-nonanediyl)]	28757-63-3	3	

Copper	7440-50-8	10	
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* The exact percentage (concentration) of composition has been withheld as a trade secret.

Section 4- First Aid Measures

(a) Description of 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. Immediate medical attention is required. May cause an allergic skin reaction. Remove and isolate contaminated clothing and shoes.
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 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:	Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wear personal protective clothing (see section 8).

(b) Most important symptoms/effects, acute and delayed

Most important symptoms and effects:	Burning sensation. Itching. Rashes. Hives. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Coughing and/ or wheezing.
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(c) Indication of any immediate medical attention and special treatment needed

Notes to Physician	May cause sensitization of susceptible persons. Treat symptomatically.
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Section 5- Fire Fighting Measures

(a) Extinguishing media

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.

(b) Special 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. Product is or contains a sensitizer. May cause sensitization by skin contact.

Hazardous Combustion Products	Carbon oxides.	
Explosion Data	Sensitivity to Mechanical Impact:	No.
	Sensitivity to Static Discharge:	No.

(c) Special protective equipment and precautions for fire-fighters

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

Section 6- Accidental Release Measures

(a) 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.

(b) Environmental Precautions

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

(c) Methods and materials 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.

Section 7- Handling and Storage

(a) Precautions for safe handling

Handling:	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.
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(b) 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.

Section 8 - Exposure Controls/Personal Protection

(a) Control parameters

Exposure Guidelines			
Exposure Guidelines	ACGIH TLV	OSHA PEL	NIOSH IDLH
Manganese dioxide 1313-13-9	TWA:1.5mg/m ³	TWA:1mg/m ³ (vacated) TWA:1 mg/m ³	IDLH:10mg/m ³ TWA:0.015mg/m ³
Iron 7439-89-6	TWA: 0.2mg/m ³ Ni inhalable fraction	TWA: 1mg/m ³ Ni (vacated) TWA: 1mg/m ³ Ni	IDLH: 10mg/m ³ Ni TWA: 0.01 mg/m ³ except Nickel carbonyl Ni
Graphite 7782-42-5	TWA: 0.02mg/m ³	TWA: 0.1mg/m ³ dust and fume (vacated) TWA: 0.05mg/m ³ dust and fume	IDLH: 20mg/m ³ dust and fume TWA: 0.05mg/m ³ dust and fume
Potassium hydroxide 1310-58-3	Ceiling: 2mg/m ³	TWA: 2mg/m ³ (vacated) Ceiling: 2mg/m ³	IDLH: 10mg/m ³ Ceiling: 2mg/m ³
Zinc 7440-66-6	Ceiling: 2mg/m ³	(vacated) Ceiling: 2mg/m ³	Ceiling: 2mg/m ³
Zinc oxide 1314-13-2	TWA: 0.02mg/m ³ Co	--	--
Indium hydroxide 20661-21-6	TWA: 0.02mg/m ³ respirable fraction TWA: 0.1mg/m ³ inhalable fraction TWA: 0.02mg/m ³ Mn TWA: 0.1mg/m ³ Mn	(vacated) TWA: 1mg/m ³ fume (vacated) STEL: 3mg/m ³ fume (vacated) Ceiling: 5mg/m ³ Ceiling: 5mg/m ³ fume Ceiling: 5mg/m ³ Mn	IDLH: 500mg/m ³ TWA: 1 mg/m ³ fume STEL: 3mg/m ³
Poly[imino-1,6-hexane diylimino(1,9-dioxo-1,9-nonanedyl)] 28757-63-3	--	---	---
Copper 7440-50-8	---	---	---

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value

OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits 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
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(b) Appropriate engineering controls

Engineering Measures	Showers Eyewash stations Ventilation systems
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(c) Individual protection measures, such as personal protective equipment.

Eye/Face Protection:	None required for consumer use. If there is a Hazard of contact: Tight sealing safety goggles. Face protection shield.
Skin and Body Protection:	None required for consumer use. If there is a Hazard of contact: Wear protective gloves and protective clothing.
Respiratory Protection	No 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. No information available.

Section 9- Physical and Chemical Properties

(a) Physical State

Physical state:	Solid		
Appearance:	Cylindrical	Odor:	Odorless
Odor Threshold:No information available			

(b) Chemical Properties

Property	Values	Remarks/ Method
pH	No data available	None known
Melting point/freezing point	No data available	None known
Initial Boiling Point And Boiling Range	No data available	None known
Flash Point	No data available	None known
Evaporation Rate	No data available	None known
Flammability (Solid, Gas)	No data available	None known
Upper/Lower Flammability Or Explosive Limits	No data available	
Vapor Pressure	No data available	None known
Vapor Density	No data available	None known
Relative Density	No data available	None known
Solubility(les)	Insoluble in water	None known
Partition Coefficient: N-Octanol/Water	No data available	None known
Auto-Ignition Temperature	No data available	None known

Decomposition Temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Explosive properties	No data available	
Oxidizing Properties	No data available	

(c) Other Information

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

Section 10 – Stability and Reactivity

(a) Reactivity	No data available.
(b) Chemical stability	Stable under recommended storage conditions.
(c) Possibility of hazardous reactions	None under normal processing.
(d) Hazardous polymerization	Hazardous polymerization does not occur.
(e) Conditions to avoid	None known based on information supplied.
(f) Hazardous decomposition products	Carbon oxides.

Section 11 – Toxicological Information

(a) Information on the 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.
Eye Contact	Specific test data for the substance or mixture is not available. Expected to be an irritant based on components. Irritating to eyes. May cause redness, itching, and pain. May cause temporary eye irritation.
Skin Contact	Specific test data for the substance or mixture is not available. Corrosive. (based on components). Causes burns. May be absorbed through the skin in harmful amounts. Harmful in contact with skin.
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. May be harmful if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Manganese dioxide 1313-13-9	-	-	-
Iron 7439-89-6	-	-	-
Graphite 7782-42-5	-	-	-
Potassium hydroxide 1310-58-3	-	-	-
Zinc 7440-66-6	-	-	-
Zinc oxide 1314-13-2	-	-	-
Indium hydroxide 20661-21-6	-	-	-
Poly[imino-1,6-hexanediyl imino(1,9-dioxo-1,9-nonan ediyl)] 28757-63-3	-	-	-
Copper 7440-50-8	-	-	-

(b) Information on toxicological effects

Symptoms	Erythema (skin redness). May cause redness and tearing of the eyes. May cause blindness. Burning. 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. Coughing and/ or wheezing.
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(c) Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization:	May cause sensitization of susceptible persons. May cause sensitization by skin contact. May cause sensitization by inhalation.
Mutagenic Effects:	There is no data available for this product. 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
Manganese dioxide 1313-13-9	A1	Group 2B	Known	X
Iron	A1	Group 1	Known	X

7439-89-6				
Graphite 7782-42-5	A1	Group 2A Group 2B	Known	X
Potassium hydroxide 1310-58-3	A1	Group 2B	Known	X
Zinc 7440-66-6	A1	Group 2A Group 2B	Known	X
Zinc oxide 1314-13-2	A1	Group 2A Group 2B	Known	X
Indium hydroxide 20661-21-6	A2	Group 2A Group 2B	Known	X
Poly[imino-1,6-hexa nediylimino(1,9-dio xo-1,9-nonanediyl)] 28757-63-3	A2	Group 2A Group 2B	Known	X
Copper 7440-50-8	A3	Group 2A Group 2B	Known	X

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 2A - Probably 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).
Chronic Toxicity	Contains a known or suspected carcinogen. Avoid repeated exposure. Prolonged exposure may cause chronic effects. May cause adverse liver effects.
Target Organ Effects	Respiratory system. Eyes. Skin. Gastrointestinal tract (GI). Central Vascular System (CVS). Kidney. Liver. Lungs. Heart.
Aspiration Hazard	No information available.

(d) Numerical measures of toxicity Product Information

The following values are calculated based on chapter 3.1 of the GHS document	ATEmix (oral):	
	ATEmix (dermal):	
	ATEmix (inhalation-gas)	
	ATEmix (inhalation-dust/mist)	
	ATEmix (inhalation-vapor)	

Section 12-Ecological Information

(a) 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 7440-02-0	72h EC50: = 0.18 mg/L (Pseudokirchneriella subcapitata) 96h EC50: 0.174 - 0.311 mg/L (Pseudokirchneriella subcapitata)	96h LC50: > 100 mg/L (Brachydanio rerio) 96h LC50: = 1.3 mg/L (Cyprinus carpio) 96h LC50: = 10.4 mg/L (Cyprinus carpio)		48h EC50: > 100 mg/L 48h EC50: = 1 mg/L
Iron 7439-89-6		96h LC50: = 13.6 mg/L (Morone saxatilis)		
Cobalt 7440-48-4		96h LC50: > 100 mg/L (Brachydanio rerio)		
Sodium hydroxide 1310-73-2		96h LC50: = 45.4 mg/L (Oncorhynchus mykiss)		
Potassium hydroxide 1310-58-3		96h LC50: = 80 mg/L (Gambusia affinis)		

(b) Persistence and Degradability

No information available.

(c) Bioaccumulation

Chemical Name	Log Pow
Potassium hydroxide 1310-58-3	

(d) Other adverse effects

No information available.

Section 13 – Disposal Considerations

(a) 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 Packaging:	Disposal should be in accordance with applicable regional, national and local laws and regulations.			
Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Nickel 7440-02-0	(hazardous constituent - no waste number)	Included in waste streams: F006, F039		
Nickel hydroxide 12054-48-7	(hazardous constituent - no waste number)			

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
Manganese dioxide	Toxic powder Ignitable powder
Iron	Toxic powder Ignitable powder
Graphite	Toxic Corrosive
Potassium hydroxide	Toxic Corrosive
Zinc	Toxic
Zinc oxide	Ignitable powder
Indium hydroxide	Toxic Corrosive
Poly[imino-1,6-hexanediylimino(1,9-dioxo-1,9-nonane diyl)]	Toxic Corrosive
Copper	Toxic powder Ignitable powder

Section 14 – Transport Information

(a) UN number	Not regulated.
(b) Proper shipping name	Not regulated.
(c) Label(s) / Placard Required:	N/A
(d) Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises	
ICAO / IATA:	According to International Air Transport Association (IATA) DGR 65 th (2024 Edition), this sample can be classified as “NOT REGULATED, AS PER SPECIAL PROVISION A123”.

IMDG CODE:	Not regulated.
DOT:	Not regulated.
ADR/ ADN:	Not regulated.
In addition, the batteries should be well protected against short circuits.	

Section 15 – Regulatory Information

(a) 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

(b) 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	33	*
Iron	7439-89-6	21	*
Graphite	7782-42-5	3.5	*
Potassium hydroxide	1310-58-3	7.5	*
Zinc	7440-66-6	15	*
Zinc oxide	1314-13-2	4	*
Indium hydroxide	20661-21-6	3	*
Poly[imino-1,6-hexanediyl imino(1,9-dioxo-1,9-nona nediyl)]	28757-63-3	3	*
Copper	7440-50-8	10	*

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
Manganese dioxide 1313-13-9	X	X	X	
Iron 7439-89-6		X		X
Graphite 7782-42-5	X	X	X	X
Potassium hydroxide 1310-58-3	X	X	X	X
Zinc 7440-66-6	X	X	X	X
Zinc oxide 1314-13-2	X	X	X	X
Indium hydroxide 20661-21-6	X	X	X	X
Poly[imino-1,6-hexanediyl imino(1,9-dioxo-1,9-nona nediyl)] 28757-63-3	X	X	X	X
Copper 7440-50-8	X	X	X	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
Manganese dioxide 1313-13-9	X	X	RQ 100 lb final RQ RQ 45.4 kg final RQ
Iron 7439-89-6	X	X	RQ 10 lb final RQ RQ 4.54 kg final RQ
Graphite 7782-42-5	X	X	RQ 1000 lb final RQ RQ 454 kg final RQ
Potassium hydroxide 1310-58-3	X	X	RQ 1000 lb final RQ RQ 454 kg final RQ
Zinc	X	X	RQ 1000 lb final RQ



7440-66-6			
Zinc oxide 1314-13-2	X	X	RQ 454 kg final RQ
Indium hydroxide 20661-21-6	X	X	RQ 1000 lb final RQ RQ 454 kg final RQ
Poly[imino-1,6-hexanediylimino(1,9-dioxo-1,9-nonanediyl)] 28757-63-3	X	X	RQ 1000 lb final RQ RQ 454 kg final RQ
Copper 7440-50-8	X	X	RQ 1000 lb final RQ RQ 454 kg final RQ

(c) US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Manganese dioxide 1313-13-9	Carcinogen
Iron 7439-89-6	Carcinogen
Graphite 7782-42-5	Carcinogen
Potassium hydroxide 1310-58-3	Carcinogen
Zinc 7440-66-6	Carcinogen
Zinc oxide 1314-13-2	Carcinogen
Indium hydroxide 20661-21-6	Carcinogen
Poly[imino-1,6-hexanediylimino(1,9-dioxo-1,9-nonanediyl)] 28757-63-3	Carcinogen
Copper 7440-50-8	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Manganese dioxide 1313-13-9	X	X	X	X	X
Iron	X	X	X	X	X

7439-89-6					
Graphite	X	X	X	X	X
7782-42-5					
Potassium hydroxide	X	X	X	X	
1310-58-3					
Zinc	X	X	X	X	X
7440-66-6					
Zinc oxide	X	X	X	X	X
1314-13-2					
Indium hydroxide	X	X	X	X	X
20661-21-6					
Poly[imino-1,6-hexanediylimino(1,9-dioxo-1,9-nonanediyl)]	X	X	X	X	X
28757-63-3					
Copper	X	X	X	X	X
7440-50-8					

(d) International Regulations

Mexico

National occupational exposure limits

Component	Carcinogen Status	Exposure Limits
Manganese dioxide 1313-13-9	--	--
Iron 7439-89-6	--	--
Graphite 7782-42-5	--	--
Potassium hydroxide 1310-58-3	--	--
Zinc 7440-66-6	--	--
Zinc oxide 1314-13-2	--	--
Indium hydroxide 20661-21-6	--	--
Poly[imino-1,6-hexanediylimino(1,9-dioxo-1,9-nonanediyl)] 28757-63-3	--	--
Copper 7440-50-8	--	--

A3 - Confirmed Animal Carcinogen
Mexico - Occupational Exposure Limits - Carcinogens

Canada

WHMIS Hazard Class

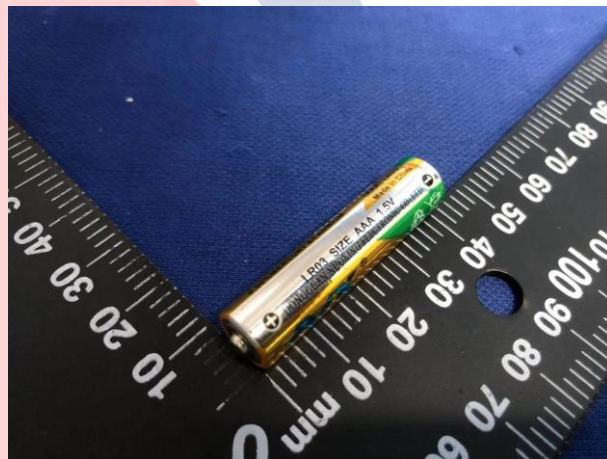
Non-controlled

Section 16 – Additional Information

NFPA	Health Hazards	3	Flammability	0	Instability	0	Physical and Chemical Hazards	-
HMIS	Health Hazards	0	Flammability	0	Physical Hazard	0	Personal Protection	X

Revision Note: No information available

Sample photo:



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 report*******

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