Issuing Date 16-Jun-2015

SAFETY DATA SHEET

Revision Date 16-Jun-2015

Revision Number 2



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

| Product identifier | |
|-------------------------------------|---|
| Product Name | D |
| Other means of identification | |
| Synonyms | None |
| Recommended use of the chemic | cal and restrictions on use |
| Recommended Use | Alkaline battery |
| Uses advised against | No information available |
| Details of the supplier of the safe | ty data sheet |
| Supplier Name | Powermax USA |
| Supplier Address | 11750 Jersey Blvd Rancho Cucamonga Ca 91730 US |
| Supplier Phone Number | Phone:2133058100 Fax:8888323558 Contact Phone8888323557 |
| Supplier Email | keia@powermaxusa.com |
| Emergency telephone 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 (Gases) | Category 4 |



| Acute toxicity - Inhalation (Dusts/Mists) | Category 4 |
|--|---------------------------|
| Skin corrosion/irritation | Category 1 Sub-category A |
| Serious eye damage/eye irritation | Category 1 |
| Skin sensitization | Category 1 |
| Carcinogenicity | Category 2 |
| Specific target organ toxicity (repeated exposure) | Category 2 |

GHS Label elements, including precautionary statements

| | Emergency Over | view | |
|--|---|---|------|
| Signal word | Danger | | |
| Hazard Statements Harmful if inhaled Causes severe skin burns May cause an allergic skin Suspected of causing can May cause damage to org | reaction | | |
| | | | |
| | | y information is given for exposure to the article as sold ical substance. This is a battery. In case of rupture: the xist. | |
| Appearance Solid | Physical state S | olid Odor Odor | less |
| Use personal protective ec | before use ty precautions have been read and understoo | d | |

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

Contaminated work clothing should not be allowed out of the workplace Wear protective gloves

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 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 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% 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

| Chemical Name | CAS No | Weight-% | Trade Secret |
|---------------------|-----------|----------|--------------|
| Manganese dioxide | 1313-13-9 | 30 - 60 | * |
| Zinc | 7440-66-6 | 10 - 30 | * |
| Iron | 7439-89-6 | 10 - 30 | * |
| Potassium hydroxide | 1310-58-3 | 5 - 10 | * |
| Graphite | 7782-42-5 | 1 - 5 | * |
| Nickel | 7440-02-0 | 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 | 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. May cause an allergic skin reaction. |



| 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 | 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 effe | cts, both acute and delayed |
| Most Important Symptoms and Effects | Burning sensation. Coughing and/ or wheezing. Difficulty in breathing. Itching. Rashes. Hives. |
| Indication of any immediate medica | al 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. May cause sensitization of susceptible persons. Treat symptomatically. |

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

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

<u>Unsuitable extinguishing media</u> CAUTION: Use of water spray when fighting fire may be inefficient.

<u>Specific hazards arising from the chemical</u> The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire and/or explosion do not breathe fumes. Product is or contains a sensitizer. May cause sensitization by 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 | 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 | 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 containme | ent 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.

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 | TWA: 0.02 mg/m ³ Mn | (vacated) Ceiling: 5 mg/m ³ | IDLH: 500 mg/m ³ Mn |
| 1313-13-9 | TWA: 0.1 mg/m³ Mn | Ceiling: 5 mg/m ³ Mn | TWA: 1 mg/m ³ Mn |
| | | | STEL: 3 mg/m ³ Mn |
| Zinc | STEL: 10 mg/m ³ respirable | TWA: 5 mg/m ³ fume | IDLH: 500 mg/m ³ |
| 7440-66-6 | fraction | TWA: 15 mg/m ³ total dust | Ceiling: 15 mg/m ³ dust |
| | TWA: 2 mg/m ³ respirable fraction | TWA: 5 mg/m ³ respirable fraction | TWA: 5 mg/m ³ dust and fume |



| | | | STEL: 10 mg/m ³ fume |
|----------------------------------|--|--|---|
| Potassium hydroxide 1310-58-3 | Ceiling: 2 mg/m ³ | (vacated) Ceiling: 2 mg/m ³ | Ceiling: 2 mg/m ³ |
| Graphite | TWA: 2 mg/m ³ respirable fraction | TWA: 15 mg/m ³ total dust | IDLH: 1250 mg/m ³ |
| 7782-42-5 | all forms except graphite fibers | synthetic | TWA: 2.5 mg/m ³ respirable dus |
| | | TWA: 5 mg/m ³ respirable fraction | |
| | | synthetic | |
| | | (vacated) TWA: 2.5 mg/m ³ | |
| | | respirable dust natural | |
| | | (vacated) TWA: 10 mg/m ³ total | |
| | | dust synthetic | |
| | | (vacated) TWA: 5 mg/m ³ | |
| | | respirable fraction synthetic | |
| | | TWA: 15 mppcf natural | |
| Nickel | TWA: 1.5 mg/m ³ | TWA: 1 mg/m ³ | IDLH: 10 mg/m ³ |
| 7440-02-0 | | (vacated) TWA: 1 mg/m ³ | TWA: 0.015 mg/m ³ |

 7440-02-0
 (vacated) TWA: 1 mg/m³
 TWA: 0.015 mg/m³

 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

Appropriate engineering controls

| Engineering Measures | Showers Eyewash stations Ventilation systems |
|--------------------------------|--|
| Individual protection measures | s, such as personal protective equipment |
| Eye/face protection | Face protection shield. |
| 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 | 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. 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 Appearance Color | Solid Solid No information available | Odor Odor Threshold | Odorless No information available |
|---------------------------------------|--|------------------------|--------------------------------------|
| Property | Values | Remarks Method | |
| H | No data available | None known | |
| Melting / freezing point | No data available | None known | |
| Boiling point / 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 | |
| | | | |



| Flammability Limit in Air | |
|--|-------------------|
| Upper flammability limit | No data available |
| Lower flammability limit | No data available |
| Vapor pressure | No data available |
| Vapor density | No data available |
| Specific Gravity | No data available |
| Water Solubility | Partially soluble |
| Solubility in other solvents | No data available |
| Partition coefficient: n-octanol/water | No data available |
| Autoignition temperature | No data available |
| Decomposition temperature | No data available |
| Kinematic viscosity | No data available |
| Dynamic viscosity | No data available |
| Explosive properties | No data available |
| Oxidizing properties | No data available |
| Other Information | |
| Softening Point | No data available |
| VOC Content (%) | No data available |
| Particle Size | No data available |
| Particle Size Distribution | |

None known None known

10. STABILITY AND REACTIVITY

Reactivity

No data available.

<u>Chemical stability</u> Stable under recommended storage conditions. <u>Possibility of Hazardous Reactions</u> None under normal processing. <u>Conditions to avoid</u> Exposure to air or moisture over prolonged periods. Excessive heat. <u>Incompatible materials</u> Acids. Bases. Oxidizing agent. <u>Hazardous Decomposition Products</u> 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. 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 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. |
|--------------|---|
| Ingestion | Specific 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 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. Harmful if swallowed. |

Component Information

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|----------------------------------|---------------------|-------------|-----------------|
| Manganese dioxide 1313-13-9 | = 9000 mg/kg (Rat) | - | - |
| lron 7439-89-6 | = 984 mg/kg (Rat) | - | - |
| Potassium hydroxide 1310-58-3 | = 214 mg/kg (Rat) | - | - |
| Graphite 7782-42-5 | > 10000 mg/kg (Rat) | - | - |
| Nickel 7440-02-0 | > 9000 mg/kg (Rat) | - | - |

Information on toxicological effects

| Symptoms | Erythema (skin redness). Burning. May cause blindness. Coughing and/ or wheezing. Itching. Rashes. Hives. | | |
|--|---|--|--|
| 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 | | |
| 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 |
|---------------|-------|----------|------------------------|------|
| Nickel | | Group 2B | Reasonably Anticipated | Х |
| 7440-02-0 | | | | |

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

NTP (National Toxicology Program)

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 No information available.

STOT - single exposure No information available.

Causes damage to organs through prolonged or repeated exposure. Based on **STOT - repeated exposure** 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. Contains a known or suspected carcinogen. Avoid repeated exposure. Prolonged exposure may cause chronic effects. May cause adverse effects on the bone marrow and blood-forming system. | | |
|----------------------|--|--|--|
| Target Organ Effects | None under normal use conditions. Respiratory system. Eyes. Skin. Gastrointestinal tract (GI). Blood. Central Nervous System (CNS). Central Vascular System (CVS). Kidney. Cardiovascular system. Liver. | | |
| 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) 876.00 mg/kg ATEmix (inhalation-gas) 10,766.00 ppm (4 hr) ATEmix (inhalation-dust/mist) 3.60 mg/l ATEmix (inhalation-vapor) 26.00 ATEmix



12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life. Very toxic to aquatic life with long lasting effects.

| Chemical Name | Toxicity to Algae | Toxicity to Fish | Toxicity to Microorganisms | Daphnia Magna (Water Flea) |
|----------------------------------|--|--|-------------------------------|--|
| 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 (Oncorhynchus mykiss) | | 48h EC50: 0.139 - 0.908 mg/L |
| Iron 7439-89-6 | | 96h LC50: = 13.6 mg/L (Morone saxatilis) | | |
| Potassium hydroxide 1310-58-3 | | 96h LC50: = 80 mg/L (Gambusia affinis) | | |
| 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 |

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.



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 Packaging

Dispose of contents/containers in accordance with local regulations.

| | Chemical Name | RCRA | RCRA - Basis for Listing | RCRA - D Series Wastes | RCRA - U Series Wastes |
|---|---------------|-----------------------------|---------------------------------|-------------------------------|------------------------|
| ſ | Nickel | (hazardous constituent - no | Included in waste streams: | | |
| | 7440-02-0 | waste number) | F006, F039 | | |

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 |
|---------------------|----------------------------|
| Zinc 7440-66-6 | Ignitable powder Toxic |
| Potassium hydroxide | Toxic |
| 1310-58-3 | Corrosive |
| Nickel | Toxic powder |
| 7440-02-0 | Ignitable powder |

14. TRANSPORT INFORMATION

| | 15. REGULATOR |
|--|---------------------------------------|
| ADN | Not regulated |
| ADR | Not regulated |
| <u>RID</u> | Not regulated |
| IMDG/IMO Hazard Class | Not regulated N/A |
| IATA_ Proper Shipping Name Hazard Class | Not regulated NON REGULATED N/A |
| ICAO | Not regulated |
| MEX | Not regulated |
| TDG | Not regulated |
| <u>DOT</u> Proper Shipping Name Hazard Class | NOT REGULATED NON REGULATED N/A |

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

<u>SARA 313</u>

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 | 30 - 60 | 1.0 |
| Zinc - 7440-66-6 | 7440-66-6 | 10 - 30 | 1.0 |
| Nickel - 7440-02-0 | 7440-02-0 | 0.1 - 1 | 0.1 |
| 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 | Х | |
| Potassium hydroxide 1310-58-3 | 1000 lb | | | х |
| Nickel 7440-02-0 | | X | 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 | Extremely Hazardous Substances RQs | RQ |
|---------------------|--------------------------|---------------------------------------|---------------------|
| Zinc | 1000 lb | | RQ 454 kg final RQ |
| 7440-66-6 | | | RQ 1000 lb final RQ |
| Potassium hydroxide | 1000 lb | | RQ 1000 lb final RQ |
| 1310-58-3 | | | RQ 454 kg final RQ |
| Nickel | 100 lb | | RQ 100 lb final RQ |
| 7440-02-0 | | | RQ 45.4 kg final RQ |

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

| Chemical Name | California Proposition 65 |
|--------------------------------------|---------------------------|
| Nickel - 7440-02-0 | Carcinogen |
| LLO Otata Dimbt ta Kuasu Damulatiana | |

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 | Х | X | Х | Х | |
| Potassium hydroxide 1310-58-3 | Х | X | Х | Х | |
| Graphite 7782-42-5 | Х | X | Х | | |
| Nickel 7440-02-0 | Х | X | Х | Х | Х |

International Regulations

Mexico

National occupational exposure limits

| Component | Carcinogen Status | Exposure Limits |
|--------------------|-------------------|------------------------------------|
| Manganese dioxide | | Mexico: TWA= 0.2 mg/m ³ |
| 1313-13-9(30-60) | | |
| Graphite | | Mexico: TWA= 2 mg/m ³ |
| 7782-42-5 (1-5) | | - |
| Nickel | | Mexico: TWA 1 mg/m ³ |
| 7440-02-0(0.1 - 1) | | |

Mexico - Occupational Exposure Limits - Carcinogens

Canada WHMIS Hazard Class

Not determined

16. OTHER INFORMATION

| NFPA | Health Hazards 1 | Flammability 0 | Instability 0 | Physical and Chemical Hazards |
|---------------|------------------|---|-------------------|----------------------------------|
| HMIS | Health Hazards 0 | Flammability 0 | Physical Hazard 0 | Personal Protection X |
| Prepared By | 23 British | Stewardship American Blvd. NY 12110 2-6501 | | |
| Issuing Date | 16-Jun-20 | 015 | | |
| Revision Date | 16-Jun-20 | 015 | | |
| Revision Note | No inform | nation 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

