your partner in food safety

# SDS
## Safety Data Sheet

## 1) **Product Identification**

**Product Name: Cir Tec SP**

**Product Code: I00097**

**Recommended Use:** A strong alkaline powder cleaner containing detergents and chelating agents to remove metal oxides from working surfaces.

**Producer:** Birko Corporation
9152 Yosemite Street
Henderson, CO 80640-8027

**Contact Information:** (303) 289-1090 or 1-800-525-0476

**Emergency Number:** CHEMTREC 1-800-424-9300

## 2) **Hazard(s) Identification**

| Health | Environmental | Physical |
|---|---|---|
| Acute Toxicity Cat. 4<br>Skin Corrosion Cat. 1A<br>Eye Effects Cat. 1 | Aquatic Toxicity<br>Cat. 1 | Corrosive Cat. 1 |

**Labeling:**

**Symbol:** 

**Signal Word: Danger**
**Corrosive, Irritant, Aquatic Toxicity**

**Hazard Statement(s):** This product causes irreversible eye damage, and is harmful or fatal if swallowed. Do not get into eyes or on clothing. In case of contact immediately flush with water for at least 15 minutes. Corrosive to certain types of metals.

**Precautionary Statement(s):** Use rubber gloves, protective splash-proof goggles, and protective clothing. Remove contaminated clothing and wash before re-use. Do not contaminate food, feed, or water. Keep container closed when not in use.

## 3) Composition/ Information on Ingredients

| Name(s) | Synonym(s) | CAS Number | Weight % |
|---|---|---|---|
| Sodium Hydroxide | Caustic Soda | 1310-73-2 | < 90% |

## 4) First-Aid Measures

| Inhalation | Skin Contact | Eye Contact | Ingestion |
|---|---|---|---|
| Remove from exposure. Administer oxygen if breathing is difficult. Resuscitate if necessary. Get medical help immediately | Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. | Immediately rinse eyes thoroughly in cool running water for at least 15 minutes. Seek immediate medical attention. | DO NOT give anything by mouth to an unconscious person. DO NOT induce vomiting. If the material is swallowed, give water. Seek immediate medical attention. |

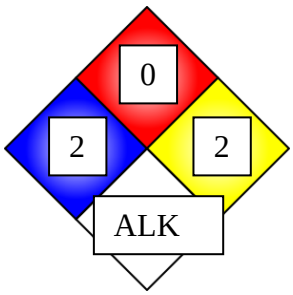
## 5) Firefighting Measures

**Suitable Extinguishing Media:** Water, Dry Chemical, Carbon Dioxide, and Foam Blanket

**Unsuitable Extinguishing Media:** N/A

**Specific Hazards:** Always wear self-contained breathing apparatus when fighting a chemical fire.

**Special Protective Actions for Fire-Fighters:** Contact with some metals (magnesium, aluminum, and galvanized zinc) can generate hydrogen. Carbon Monoxide/Carbon Dioxide gas liberated during combustion.




## 6) Accidental Release Measures

**Personal Precautions:** Be sure to use all necessary Personal Protective Equipment

**Environmental Precautions:** Avoid contamination of food, feed, waterway, sewers, or groundwater.

**Methods and Materials for Containment and Clean-Up: In Solution:** Remove all non-necessary personal from spill area, preferred upwind of spill site. Wear NIOSH approved respiratory protection, and sweep up material and deposit material in a recovery drum for disposal or reuse. For wet material dilute with large amounts of water then neutralize material. Capture for reuse or disposal.

## 7) Handling and Storage

**Precautions for Safe Handling:** Do not contaminate food, feed, or natural water. Supplier is not responsible for disposition of this product. RELEASES HEAT WHEN MIXED WITH WATER. Maintain an eyewash station, and safety shower in product handling areas.

**Conditions for Safe Storage:** Keep container closed when not in use. Store in a cool, dry location.

## 8) Exposure Controls and Personal Protection

**Appropriate Engineering Controls:** Ventilation: Provide local exhaust ventilation where dust or mist may be generated. Ensure compliance with applicable exposure limits.

**Exposure Limits:**

| Name (CAS-No.) | PEL | TWA | CEILING | IDLH |
|---|---|---|---|---|
| Sodium Hydroxide (01310-73-2) | 2 mg/m3 | ACGIH 2mg/m3 OSHA 2mg/m3 | ACGIH 2mg/m3 OSHA 2mg/m3 | 10 mg/m3 |

**Personal Protective Equipment**

| Eye/Face | Skin | Gloves | Respirary | Boots |
|---|---|---|---|---|
|  |  |  |  |  |

**Eye/Face:** Wear chemical/dust safety goggles.

**Skin:** Wear boots, aprons, or chemical suits to prevent skin contact.

**Gloves:** Wear appropriate chemical resistant gloves.

**Respiratory:** Use only a NOISH N95 approved dust mask when in contact with powdered products. If eye irritation occurs use a full face style mask. If respirators are warranted in the workplace a respiratory protection programs must meet 29 CFR 1910.134, and be followed.

**Protective Material Types:** Nitrile, neoprene, and natural rubber

## 9) Physical and Chemical Properties

**Physical Form:** Powder

**Appearance:** White-tan

**Odor:** Odorless, but harsh if inhaled

**pH:** (1% Solution) 13.1

**Melting Point:** Not Established

**Freezing Point:** Not Established

**Boiling Point:** Not Established

**Flash Point:** N/A

**Evaporation Rate:** Not Established

**Flammability:** Not flammable

**Upper/Lower Flammability or explosive limits:** Not applicable

**Vapor Pressure:** Not Established

**Vapor Density:** Not Established

**Relative Density:** Not Established

**Specific Gravity:** Not applicable

**Solubility:** 100%

**Partition coefficient:** Not available

**Auto-Ignition Temperature:** Not applicable

**Decomposition Temperature:** Not available

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## 10) Stability and Reactivity

**Chemical Stability:** Stable at normal temperatures and pressure.

**Possibility of Hazardous Reactions:** This product does not polymerize.

**Conditions to Avoid:** N/A

**Materials to Avoid:** Acid, magnesium, aluminum, galvanized zinc, tin, chromium, brass, and bronze. Contact with certain metals may cause hydrogen gas. Carbon monoxide gas may be produced on contact with reducing sugars.

**Hazardous Decomposition Products:** Contact with some metals (magnesium, aluminum, and galvanized zinc) can generate hydrogen. Carbon Monoxide/Carbon Dioxide gas liberated during combustion.

## 11) Toxicological Information

**Acute Toxicity:**

| Test | Results | Basis |
|---|---|---|
| Oral LD50 (Rabbits) | 500 mg/kg | Product test data |
| Dermal LD50 (Rabbits) | 1350 mg/kg | Product test data |

**Summary Comments:** Contact with skin and eyes will cause burns. If burns occur seek immediate medical attention.

**Sub-chronic/Chronic Toxicity:**

| Chemical Name | CAS # | Mutagen | Teratogen | Carcinogen |
|---|---|---|---|---|
| NA | NA | NA | NA | NA |

**Summary Comments:** N/A

**Medical conditions aggravated by exposure:** N/A

## 12) Ecological Information

**Toxicity:**

| Test | Results |
|---|---|
| LC50 Bluegill | 240 ug/L 96 hours |

**Persistence and Degradability:** This product is not persistent in aquatic systems, but its high pH when undiluted or neutralized is acutely harmful to aquatic life.

**Bioaccumulative Potential:** This material is believed not to bioaccumulate.

**Mobility in Soil:** N/A

**Other Adverse Effects:** N/A

## 13) Disposal Considerations

**Disposal Method:** Dispose in accordance with all applicable regulations. Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): D002

## 14) Transport Information

**UN Number:** UN1823

**UN Proper Shipping Name:** Sodium Hydroxide, Solid

**Transport Hazard Class (es):** 8

**Packing Group:** II

**Environmental Hazard(s):** N/A

## 15) Regulatory Information

**US Regulations:**

**CERCLA Sections 102a/103 Hazardous substances (40 CFR 302.4):**

Sodium Hydroxide: 1000 lbs. RQ on 100% active basis

**SARA Title III SARA Sections 311/312 Hazardous Categories (40 CFR 370.21):**

Acute: Yes

Chronic: No

Fire: No

Reactive: No

Sudden Release: No

## State Regulations:

**California Proposition 65:** This product is not listed

**California Hazardous Substance List:**

Sodium Hydroxide 1310-73-2

**New Jersey Worker and Community Right to Know: Hazardous Substance List:**

Sodium Hydroxide 1310-73-2

**Pennsylvania Hazardous Substance List:**

Sodium Hydroxide 1310-73-2

**Rhode Island Hazardous Substance List:**

Sodium Hydroxide 1310-73-2

## Canadian Regulations:

**Controlled Products Regulations (CPR):** This product has been classified in accordance with the criteria of the Controlled Products Regulations and the MSDS contains all of the information required by the CPR.

**WHMIS Classification:** E

**National Inventory Status: U.S. Inventory (TSCA):** All the components of this substance are listed on or are exempt from the inventory.

**Canada Inventory (DSL/NDSL):** All components of this product are listed on the DSL

## 16) Other Information

| HMIS | |
|---|---|
| 0 | FLAMMABILITY |
| 2 | HEALTH |
| 2 | REACTIVITY |
| F | Personal Protection |

Hazard Index

4-Severe

3-Serious

2-Moderate

1-Slight

0-Minimal

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**Approved By:** Terry L. McAninch

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