# CRC MATERIAL SAFETY DATA SHEET

# Section 1: Product & Company Identification

Product Name: Copper Anti-Seize and Lubricating Compound

Product Number (s): SL35901, SL35903, 72901

Product Use: Anti-seize and lubricating compound

## Manufacturer / Supplier Contact Information:

In United States: CRC Industries, Inc. 885 Louis Drive Warminster, PA 18974 <u>www.crcindustries.com</u> 1-215-674-4300(General) (800) 521-3168 (Technical) (800) 272-4620 (Customer Service) In Canada: CRC Canada Co. 2-1246 Lorimar Drive Mississauga, Ontario L5S 1R2 <u>www.crc-canada.ca</u> 1-905-670-2291 In Mexico: CRC Industries Mexico Av. Benito Juárez 4055 G Colonia Orquídea San Luís Potosí, SLP CP 78394 www.crc-mexico.com 52-444-824-1666

24-Hr Emergency - CHEMTREC: (800) 424-9300 or (703) 527-3887

## Section 2: Hazards Identification

## Emergency Overview

Appearance & Odor: Copper semi-solid paste with petroleum odor

#### Potential Health Effects:

ACUTE EFFECTS:

- EYE: May cause irritation.
- SKIN: For hypersensitive persons, this product may irritate the skin after prolonged periods of time.
- INHALATION: Viscous nature may block breathing passages if inhaled.
- INGESTION: May cause diarrhea.
- CHRONIC EFFECTS: None known
- TARGET ORGANS: None known

Medical Conditions Aggravated by Exposure: Pre-existing skin sensitivities

See Section 11 for toxicology and carcinogenicity information on product ingredients.

## Section 3: Composition/Information on Ingredients

| COMPONENT          | CAS NUMBER                            | % by Wt. |
|--------------------|---------------------------------------|----------|
| Petroleum oil      | 64742-57-0 / 64742-52-5               | 60 - 70  |
| Nonhazardous blend | 82980-54-9 / 471-34-1 /<br>14807-96-6 | 25 – 40  |
| Graphite           | 7782-42-5                             | 1 – 10   |
| Copper powder      | 7440-50-8                             | 1 – 10   |

# Section 4: First Aid Measures

| Eve Contact: | Immediately | / flush with nlen | ty of water for 15 minutes | Call a physician if irritation persists. |
|--------------|-------------|-------------------|----------------------------|--|
|              | mmoulutor   |                   |                            |  |

- Skin Contact: Remove contaminated clothing and wash affected area with soap and water. Call a physician if irritation persists. Wash contaminated clothing prior to re-use.
- Inhalation: Remove person to fresh air. Keep person calm. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Call a physician.
- Ingestion: Wash out mouth immediately. Consult physician.

Note to Physicians: Treat symptomatically.

## Section 5: Fire-Fighting Measures

| Flammable Properties: As define | As defined by OSHA, this product is not flammable. |                        |     |  |
|---------------------------------|--|------------------------|-----|--|
| Flash Point                     | : 430°F / 221°C (COC)                              | Upper Explosive Limit: | 7.0 |  |
| Autoignition Temperature        | : > 500°F / > 260°C                                | Lower Explosive Limit: | 0.9 |  |

#### Fire and Explosion Data:

Suitable Extinguishing Media: Foam, dry powder, Halon®, carbon dioxide, sand, earth & water mist. Do not use water jet.

Products of Combustion: Smoke, soot, hydrocarbons and oxides of carbon, sulfur & nitrogen.

Explosion Hazards: Containers, when exposed to heat from fire, may build pressure and rupture.

Protection of Fire-Fighters: Firefighters should wear self-contained, NIOSH-approved breathing apparatus for protection against suffocation and possible toxic decomposition products. Proper eye and skin protection should be provided. Use water spray to keep fire-exposed containers cool and to knock down vapors which may result from product decomposition.

## Section 6: Accidental Release Measures

Personal Precautions: Use personal protection recommended in Section 8.

Environmental Precautions: Take precautions to prevent contamination of ground and surface waters. Do not flush into sewers or storm drains.

Methods for Containment & Clean-up: Dike area to contain spill. Ventilate the area with fresh air. If in confined space or limited air circulation area, clean-up workers should wear appropriate

respiratory protection. Scrape up bulk, then wipe up remainder with cloth. To prevent walking hazard, pick up remaining residue with diatomaceous earth.

## Section 7: Handling and Storage

| Handling Procedures: | Do not use near sources of ignition. Provide adequate ventilation during use. Wear appropriate |
|----------------------|--|
|                      | personal protective equipment. For product use instructions, please see the product label.     |

Storage Procedures: Store in a cool dry area out of direct sunlight. Containers should be tightly closed while in storage.

Aerosol Storage Level: NA

# Section 8: Exposure Controls/Personal Protection

#### **Exposure Guidelines**:

|                        | OSHA     |           | ACGIH    |          | OTHER |              |                   |
|------------------------|----------|-----------|----------|----------|-------|--------------|-------------------|
| COMPONENT              | TWA      | STEL      | TWA      | STEL     | TWA   | SOURCE       | UNIT              |
|                        |          |           |          | · · · -  |       |              | . 3               |
| Petroleum oil          | 5*       | NE        | 5*       | NE       | NE    |              | mg/m <sup>3</sup> |
| Nonhazardous blend     | NE       | NE        | NE       | NE       | NE    |              |                   |
| Graphite               | 2.5 (v)  | NE        | 2        | NE       | 2.5   | NIOSH        | mg/m <sup>3</sup> |
| Copper powder          | 1        | NE        | 0.1      | NE       | 1     | NIOSH        | mg/m <sup>3</sup> |
| N.E. – Not Established | (c) – ce | iling (s) | ) – skin | (v) – va | cated | * – oil mist |                   |

#### **Controls and Protection:**

| Engineering Controls:   | Area should have ventilation to provide fresh air. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at the source, preventing dispersion into the general work area. Use mechanical means if necessary to maintain vapor levels below the exposure guidelines. If working in a confined space, follow applicable OSHA regulations.            |
|-------------------------|---|
| Respiratory Protection: | None required for normal work where adequate ventilation is provided. If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with organic vapor cartridge. Air monitoring is needed to determine actual employee exposure levels. Use a self-contained breathing apparatus in confined spaces and for emergencies. |
| Eye/face Protection:    | For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.   |
| Skin Protection:        | Use protective gloves such as nitrile or PVC. Also, use full protective clothing if there is prolonged or repeated contact of liquid with skin.   |

## **Section 9: Physical and Chemical Properties**

Physical State:semi-solid pasteColor:copper/bronzeOdor:petroleumOdor Threshold:NDSpecific Gravity:1.09Initial Boiling Point:> 500°F1 / > 260°C

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|-----------------------|-------------------|---------------|---------------|--------------|---|-------------------|---|
| Freezing Point:       | ND                |               |               |              |   |                   |   |
| Vapor Pressure:       | < 0.01 kPa        |               |               |              |   |                   |   |
| Vapor Density:        | > 5               | (air =        | = 1)          |              |   |                   |   |
| Evaporation Rate:     | very slow         |               |               |              |   |                   |   |
| Solubility: neglig    | gible in water    |               |               |              |   |                   |   |
| Coefficient of water/ | oil distribution: | ND            | )             |              |   |                   |   |
| pH: NA                |                   |               |               |              |   |                   |   |
| Volatile Organic Co   | mpounds: <u>v</u> | <u>wt %</u> : | 0             | <u>g/L</u> : | 0 | <u>lbs./gal</u> : | 0 |
|                       |                   |               |               |              |   |                   |   |

# Section 10: Stability and Reactivity

Stability: Stable

| Conditions to Avoid:       | Sources of ig | Sources of ignition, temperature extremes                                 |  |  |  |  |
|----------------------------|---------------|---|--|--|--|--|
| Incompatible Materials:    | Strong inorg  | anic and organic acids, oxidizing and copper reactive agents              |  |  |  |  |
| Hazardous Decompositior    | Products:     | Smoke, airborne soot hydrocarbons and oxides of carbon, sulfur & nitrogen |  |  |  |  |
| Possibility of Hazardous R | leactions:    | No  |  |  |  |  |

# Section 11: Toxicological Information

Long-term toxicological studies have not been conducted for this product. The following information is available for components of this product.

#### Acute Toxicity:

| <u>Component</u>   | Oral LD50 (rat) | Dermal LD50 (rabbit) | Inhalation LC50 (rat) |
|--------------------|-----------------|----------------------|-----------------------|
| Petroleum oil      | > 5000 mg/kg    | > 5000 mg/kg         | No data               |
| Nonhazardous blend | No data         | No data              | No data               |
| Graphite           | No data         | No data              | No data               |
| Copper powder      | No data         | No data              | No data               |

## Chronic Toxicity:

| <u>Component</u><br>Petroleum oil | OSHA<br><u>Carcinogen</u><br>No | IARC<br><u>Carcinogen</u><br>No | NTP<br><u>Carcinogen</u><br>No | <u>Irritant</u><br>E (mild) /<br>S (mild)    | <u>Sensitizer</u><br>No |
|-----------------------------------|---------------------------------|---------------------------------|--------------------------------|--|-------------------------|
| Nonhazardous blend                | No                              | No                              | No                             | Unknown                                      | Unknown                 |
| Graphite                          | No                              | No                              | No                             | E (mild) /<br>S (mild)                       | Unknown                 |
| Copper powder                     | No                              | No                              | No                             | E (mild) /<br>S (moderate) /<br>R (moderate) | Unknown                 |

E – Eye

S – Skin

R - Respiratory

| Reproductive Toxicity: | No information available |
|------------------------|--------------------------|
| Teratogenicity:        | No information available |
| Mutagenicity:          | No information available |
| Synergistic Effects:   | No information available |

# Section 12: Ecological Information

Ecological studies have not been conducted for this product. The following information is available for components of this product.

| Ecotoxicity: In extreme c      | ases, may generate fractions that could act as a marine pollutant. |
|--------------------------------|--|
| Persistence / Degradability:   | No information available   |
| Bioaccumulation / Accumulation | Bioaccumulation potential nil.                                     |
| Mobility in Environment:       | Highly unlikely to cause widespread contamination.                 |

## **Section 13: Disposal Considerations**

<u>Waste Classification</u>: This product is not a RCRA hazardous waste. (See 40 CFR Part 261.20 – 261.33) Empty containers may be recycled.

All disposal activities must comply with federal, state, provincial and local regulations. Local regulations may be more stringent than state, provincial or national requirements.

## Section 14: Transport Information

US DOT (ground): Not Regulated

ICAO/IATA (air): Not Regulated

IMO/IMDG (water): Not Regulated

Special Provisions: None

# Section 15: Regulatory Information

#### U.S. Federal Regulations:

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All ingredients are either listed on the TSCA inventory or are exempt.

<u>Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)</u>: Reportable Quantities (RQ's) exist for the following ingredients: Copper (5,000 lbs)

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

Superfund Amendments Reauthorization Act (SARA) Title III: Section 302 Extremely Hazardous Substances (EHS): None

| Section 311/312 Hazard Categories: | Fire Hazard<br>Reactive Hazard<br>Release of Pressure<br>Acute Health Hazard<br>Chronic Health Hazard | No<br>No<br>No<br>Yes<br>No |
|------------------------------------|---|-----------------------------|
|                                    | Chronic Health Hazard   | NO                          |

Section 313 Toxic Chemicals: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of

1986 and 40 CFR Part 372: Copper (< 10%)

Clean Air Act:

Section 112 Hazardous Air Pollutants (HAPs): None

Occupational Safety and Health Administration:

This product is regulated under the Hazard Communication Standard.

#### U.S. State Regulations:

California Safe Drinking Water and Toxic Enforcement Act (Prop 65): This product may contain the following chemicals known to the state of

California to cause cancer, birth defects or other reproductive harm: None

<u>Consumer Products VOC Regulations</u>: This product is not regulated.

State Right to Know:

| New Jersey:    | 7440-50-8, 7782-42-5, 471-34-1 |
|----------------|--------------------------------|
| Pennsylvania:  | 7440-50-8, 7782-42-5, 471-34-1 |
| Massachusetts: | 7440-50-8, 7782-42-5, 471-34-1 |
| Rhode Island : | 7440-50-8, 7782-42-5, 471-34-1 |

#### **Canadian Regulations:**

**Controlled Products Regulations:** 

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS Hazard Class: This product is not regulated.

Canadian DSL Inventory: All ingredients are either listed on the DSL Inventory or are exempt.

#### **European Union Regulations:**

<u>RoHS Compliance</u>: This product is compliant with Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003. This product does not contain any of the restricted substances as listed in Article 4(1) of the RoHS Directive.

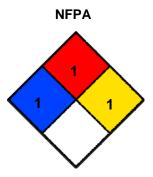
Additional Regulatory Information: None

## **Section 16: Other Information**

| HMIS® (II)    |   |  |
|---------------|---|--|
| Health:       | 1 |  |
| Flammability: | 1 |  |
| Reactivity:   | 1 |  |
| PPE:          | В |  |

Ratings range from 0 (no hazard) to 4 (severe hazard)

Prepared By: Michelle Rudnick CRC #: SL35901



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Changes since last revision:

ision: MSDS reformatted to meet the requirements of the Canadian Controlled Products Regulations.

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC Industries' knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this MSDS consult your supervisor, a health & safety professional, or CRC Industries.

- ACGIH: American Conference of Governmental Industrial Hygienists
- CAS: Chemical Abstract Service
- CFR: Code of Federal Regulations
- DOT: Department of Transportation
- DSL: Domestic Substance List
- g/L: grams per Liter
- HMIS: Hazardous Materials Identification System
- IARC: International Agency for Research on Cancer
- IATA: International Air Transport Association
- ICAO: International Civil Aviation Organization
- IMDG: International Maritime Dangerous Goods
- IMO: International Maritime Organization
- lbs./gal: pounds per gallon
- LC: Lethal Concentration
- LD: Lethal Dose

NA: Not Applicable Not Determined ND: NIOSH: National Institute of Occupational Safety & Health NFPA: National Fire Protection Association NTP: National Toxicology Program OSHA: Occupational Safety and Health Administration PMCC: Pensky-Martens Closed Cup PPE: Personal Protection Equipment ppm: Parts per Million RoHS: **Restriction of Hazardous Substances** Short Term Exposure Limit STEL: TCC: Tag Closed Cup TWA: **Time Weighted Average** WHMIS: Workplace Hazardous Materials Information System