



SAFETY DATA SHEET

1. Identification

| | |
|---|---|
| Product identifier | Copper Anti-Seize & Lubricating Compound |
| Other means of identification | |
| Product Code | No. SL35903 (Item# 1007940) |
| Recommended use | Anti-seize and lubricating compound |
| Recommended restrictions | None known. |
| Manufacturer/Importer/Supplier/Distributor information | |
| Manufactured or sold by: | |
| Company name | CRC Industries, Inc. |
| Address | 885 Louis Dr. Warminster, PA 18974 US |
| Telephone | |
| General Information | 215-674-4300 |
| Technical Assistance | 800-521-3168 |
| Customer Service | 800-272-4620 |
| 24-Hour Emergency (CHEMTREC) | 800-424-9300 (US) |
| Website | www.crcindustries.com |

2. Hazard(s) identification

| | |
|--|--|
| Physical hazards | Not classified. |
| Health hazards | Not classified. |
| Environmental hazards | Hazardous to the aquatic environment, acute hazard Category 1 Hazardous to the aquatic environment, long-term hazard Category 2 |
| OSHA defined hazards | Not classified. |
| Label elements | |
| Hazard symbol | None. |
| Signal word | None. |
| Hazard statement | Very toxic to aquatic life. Toxic to aquatic life with long lasting effects. |
| Precautionary statement | |
| Prevention | Use with adequate ventilation. Open doors and windows or use other means to ensure a fresh air supply during use and while product is drying. Observe good industrial hygiene practices. Avoid release to the environment. |
| Response | Wash hands after handling. Collect spillage. |
| Storage | Store away from incompatible materials. |
| Disposal | Dispose of contents/container in accordance with local/regional/national regulations. |
| Hazard(s) not otherwise classified (HNOC) | None known. |
| Supplemental information | None. |

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|---|---------------------------------|-------------------|----------|
| distillates (petroleum), solvent-refined heavy naphthenic | | 64741-96-4 | 50 - 60 |
| talc (not containing asbestos fibers) | | 14807-96-6 | 20 - 30 |

| Chemical name | Common name and synonyms | CAS number | % |
|------------------------|--------------------------|-------------|---------|
| calcium carbonate | | 471-34-1 | 10 - 20 |
| copper | | 7440-50-8 | 3 - 5 |
| amorphous fumed silica | | 112945-52-5 | 1 - 3 |
| amorphous silica | | 7631-86-9 | 1 - 3 |
| graphite | | 7782-42-5 | < 1 |

Specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

| | |
|---|---|
| Inhalation | Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Call a physician if symptoms develop or persist. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. |
| Skin contact | Rinse skin with water/shower. Get medical attention if irritation develops and persists. Remove and isolate contaminated clothing and shoes. Wash contaminated clothing before reuse. |
| Eye contact | Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. |
| Ingestion | Rinse mouth. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical attention if symptoms occur. Never give anything by mouth to a victim who is unconscious or is having convulsions. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. |
| Most important symptoms/effects, acute and delayed | Direct contact with eyes may cause temporary irritation. |
| Indication of immediate medical attention and special treatment needed | Treat symptomatically. |
| General information | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. |

5. Fire-fighting measures

| | |
|--|--|
| Suitable extinguishing media | Dry chemicals. Carbon dioxide (CO ₂). Water spray. Water fog. Foam. |
| Unsuitable extinguishing media | None known. |
| Specific hazards arising from the chemical | During fire, gases hazardous to health may be formed. |
| Special protective equipment and precautions for firefighters | Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. |
| General fire hazards | No unusual fire or explosion hazards noted. |

6. Accidental release measures

| | |
|--|---|
| Personal precautions, protective equipment and emergency procedures | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS. |
| Methods and materials for containment and cleaning up | The product is immiscible with water and will sediment in water systems. Prevent product from entering drains. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Sweep up or vacuum up spillage and collect in suitable container for disposal. Stop the flow of material, if this is without risk. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS. |
| Environmental precautions | Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. |

7. Handling and storage

Precautions for safe handling Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices. For product usage instructions, see the product label.

Conditions for safe storage, including any incompatibilities Store in a cool, dry place out of direct sunlight. Keep container tightly closed. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

| Components | Type | Value | Form |
|--|------|------------------------|----------------------|
| calcium carbonate (CAS 471-34-1) | PEL | 5 mg/m ³ | Respirable fraction. |
| | | 15 mg/m ³ | Total dust. |
| copper (CAS 7440-50-8) | PEL | 1 mg/m ³ | Dust and mist. |
| | | 0.1 mg/m ³ | Fume. |
| distillates (petroleum), solvent-refined heavy naphthenic (CAS 64741-96-4) | PEL | 5 mg/m ³ | Mist. |
| | | 2000 mg/m ³ | |
| graphite (CAS 7782-42-5) | PEL | 500 ppm | |
| | | 5 mg/m ³ | Respirable fraction. |
| | | 15 mg/m ³ | Total dust. |

US. OSHA Table Z-3 (29 CFR 1910.1000)

| Components | Type | Value | Form |
|--|------|-----------------------|-------------|
| amorphous fumed silica (CAS 112945-52-5) | TWA | 0.8 mg/m ³ | |
| | | 20 mppcf | |
| amorphous silica (CAS 7631-86-9) | TWA | 0.8 mg/m ³ | |
| | | 20 mppcf | |
| graphite (CAS 7782-42-5) | TWA | 15 mppcf | |
| talc (not containing asbestos fibers) (CAS 14807-96-6) | TWA | 0.1 mg/m ³ | Respirable. |
| | | 20 mppcf | |
| | | 2.4 mppcf | Respirable. |

US. ACGIH Threshold Limit Values

| Components | Type | Value | Form |
|--|------|-----------------------|----------------------|
| copper (CAS 7440-50-8) | TWA | 1 mg/m ³ | Dust and mist. |
| | | 0.2 mg/m ³ | Fume. |
| distillates (petroleum), solvent-refined heavy naphthenic (CAS 64741-96-4) | TWA | 5 mg/m ³ | Inhalable fraction. |
| | | | |
| graphite (CAS 7782-42-5) | TWA | 2 mg/m ³ | Respirable fraction. |
| talc (not containing asbestos fibers) (CAS 14807-96-6) | TWA | 2 mg/m ³ | Respirable fraction. |

US. NIOSH: Pocket Guide to Chemical Hazards

| Components | Type | Value | Form |
|--|------|---------------------|------|
| amorphous fumed silica (CAS 112945-52-5) | TWA | 6 mg/m ³ | |

US. NIOSH: Pocket Guide to Chemical Hazards

| Components | Type | Value | Form |
|--|---------|------------|----------------|
| amorphous silica (CAS 7631-86-9) | TWA | 6 mg/m3 | |
| calcium carbonate (CAS 471-34-1) | TWA | 5 mg/m3 | Respirable. |
| | | 10 mg/m3 | Total |
| copper (CAS 7440-50-8) | TWA | 1 mg/m3 | Dust and mist. |
| | | 0.1 mg/m3 | Fume. |
| distillates (petroleum), solvent-refined heavy naphthenic (CAS 64741-96-4) | Ceiling | 1800 mg/m3 | |
| | STEL | 10 mg/m3 | Mist. |
| graphite (CAS 7782-42-5) | TWA | 2.5 mg/m3 | Respirable. |
| talc (not containing asbestos fibers) (CAS 14807-96-6) | TWA | 2 mg/m3 | Respirable. |

Biological limit values

No biological exposure limits noted for the ingredient(s).

Exposure guidelines

Occupational Exposure Limits are not relevant to the current physical form of the product.

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower should be available when handling this product.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Wear safety glasses with side shields (or goggles).

Skin protection**Hand protection**

Wear protective gloves such as: Nitrile.

Other

Wear suitable protective clothing.

Respiratory protection

If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Wear a dust mask if dust is generated above exposure limits. Air monitoring is needed to determine actual employee exposure levels.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties**Appearance****Physical state**

Solid.

Form

Paste.

Color

Copper.

Odor

Petroleum.

Odor threshold

Not available.

pH

Not available.

Melting point/freezing point

1981.4 °F (1083 °C) estimated

Initial boiling point and boiling range

680 °F (360 °C) estimated

Flash point

420 °F (215.6 °C) Cleveland Open Cup

Evaporation rate

Very slow.

Flammability (solid, gas)

Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Vapor pressure 4119 hPa estimated

Vapor density Not available.

Relative density 1.21

Solubility(ies)

Solubility (water) Insoluble.

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature 500 °F (260 °C) estimated

Decomposition temperature Not available.

Viscosity Not available.

Percent volatile 54.8 % estimated

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.

Conditions to avoid Heat, flames and sparks. Contact with incompatible materials.

Incompatible materials Oxidizing material. Acids. Alkalies.

Hazardous decomposition products Carbon oxides. Metal oxides. Halogenated materials.

11. Toxicological information**Information on likely routes of exposure**

Inhalation Prolonged inhalation may be harmful.

Skin contact No adverse effects due to skin contact are expected.

Eye contact Direct contact with eyes may cause temporary irritation.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity Not known.

| Product | Species | Test Results |
|---------|---------|--------------|
|---------|---------|--------------|

Copper Anti-Seize & Lubricating Compound

Acute**Oral**

| | | |
|------|-----|--------------|
| LD50 | Rat | 109000 mg/kg |
|------|-----|--------------|

| Components | Species | Test Results |
|------------|---------|--------------|
|------------|---------|--------------|

amorphous fumed silica (CAS 112945-52-5)

Acute**Oral**

| | | |
|------|-----|--------------|
| LD50 | Rat | > 5000 mg/kg |
|------|-----|--------------|

amorphous silica (CAS 7631-86-9)

Acute**Oral**

| | | |
|------|-----|---------------|
| LD50 | Rat | > 22500 mg/kg |
|------|-----|---------------|

| Components | Species | Test Results |
|--|--|---------------|
| calcium carbonate (CAS 471-34-1) | | |
| Acute | | |
| Dermal | | |
| LD50 | Rabbit | > 2000 mg/kg |
| Inhalation | | |
| LC50 | Rat | > 3 mg/l |
| Oral | | |
| LD50 | Rat | 6450 mg/kg |
| distillates (petroleum), solvent-refined heavy naphthenic (CAS 64741-96-4) | | |
| Acute | | |
| Dermal | | |
| LD50 | Rabbit | > 5000 mg/kg |
| Oral | | |
| LD50 | Rat | > 5000 mg/kg |
| graphite (CAS 7782-42-5) | | |
| Acute | | |
| Oral | | |
| LD50 | Rat | > 10000 mg/kg |
| Skin corrosion/irritation | Prolonged skin contact may cause temporary irritation. | |
| Serious eye damage/eye irritation | Direct contact with eyes may cause temporary irritation. | |
| Respiratory or skin sensitization | | |
| Respiratory sensitization | Not a respiratory sensitizer. | |
| Skin sensitization | This product is not expected to cause skin sensitization. | |
| Germ cell mutagenicity | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. | |
| Carcinogenicity | Not classifiable as to carcinogenicity to humans. | |
| IARC Monographs. Overall Evaluation of Carcinogenicity | | |
| amorphous fumed silica (CAS 112945-52-5) | 3 Not classifiable as to carcinogenicity to humans. | |
| amorphous silica (CAS 7631-86-9) | 3 Not classifiable as to carcinogenicity to humans. | |
| OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052) | | |
| Not regulated. | | |
| US. National Toxicology Program (NTP) Report on Carcinogens | | |
| Not listed. | | |
| Reproductive toxicity | This product is not expected to cause reproductive or developmental effects. | |
| Specific target organ toxicity - single exposure | Not classified. | |
| Specific target organ toxicity - repeated exposure | Not classified. | |
| Aspiration hazard | Not an aspiration hazard. | |
| Chronic effects | Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects. | |

12. Ecological information

| | |
|--------------------------------------|---|
| Ecotoxicity | Very toxic to aquatic life. Toxic to aquatic life with long lasting effects. |
| Persistence and degradability | No data is available on the degradability of any ingredients in the mixture. |
| Bioaccumulative potential | No data available. |
| Mobility in soil | No data available. |
| Other adverse effects | No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component. |

13. Disposal considerations

| | |
|-------------------------------|---|
| Disposal instructions | This product is not a RCRA hazardous waste (See 40 CFR Part 261.20 – 261.33). Empty containers may be recycled. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose in accordance with all applicable regulations. |
| Hazardous waste code | Not regulated. |
| Contaminated packaging | Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. |

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory information

US federal regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

copper (CAS 7440-50-8)

CERCLA Hazardous Substance List (40 CFR 302.4)

copper (CAS 7440-50-8) Listed.

CERCLA Hazardous Substances: Reportable quantity

copper (CAS 7440-50-8) 5000 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.

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

Food and Drug Administration (FDA) Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)**SARA 302 Extremely hazardous substance**

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

| Chemical name | CAS number | % by wt. |
|---------------|------------|----------|
| copper | 7440-50-8 | 3 - 5 |

US state regulations**US. New Jersey Worker and Community Right-to-Know Act**

calcium carbonate (CAS 471-34-1)

copper (CAS 7440-50-8)

graphite (CAS 7782-42-5)

talco (not containing asbestos fibers) (CAS 14807-96-6)

US. Massachusetts RTK - Substance List

amorphous fumed silica (CAS 112945-52-5)
amorphous silica (CAS 7631-86-9)
calcium carbonate (CAS 471-34-1)
copper (CAS 7440-50-8)
distillates (petroleum), solvent-refined heavy naphthenic (CAS 64741-96-4)
graphite (CAS 7782-42-5)
talco (not containing asbestos fibers) (CAS 14807-96-6)

US. Pennsylvania Worker and Community Right-to-Know Law

amorphous fumed silica (CAS 112945-52-5)
amorphous silica (CAS 7631-86-9)
calcium carbonate (CAS 471-34-1)
copper (CAS 7440-50-8)
graphite (CAS 7782-42-5)
talco (not containing asbestos fibers) (CAS 14807-96-6)

US. Rhode Island RTK

calcium carbonate (CAS 471-34-1)
copper (CAS 7440-50-8)
distillates (petroleum), solvent-refined heavy naphthenic (CAS 64741-96-4)
graphite (CAS 7782-42-5)
talco (not containing asbestos fibers) (CAS 14807-96-6)

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

copper (CAS 7440-50-8)
distillates (petroleum), solvent-refined heavy naphthenic (CAS 64741-96-4)
talco (not containing asbestos fibers) (CAS 14807-96-6)

Volatile organic compounds (VOC) regulations

EPA

VOC content (40 CFR 51.100(s)) 2.9 %
Consumer products (40 CFR 59, Subpt. C) Not regulated

State

Consumer products This product is regulated as an Anti-seize Lubricant (non-aerosol). This product is compliant for use in all 50 states.
VOC content (CA) 2.9 %
VOC content (OTC) 2.9 %

International Inventories

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|----------------------|--|------------------------|
| Australia | Australian Inventory of Chemical Substances (AICS) | Yes |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | Yes |
| China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | No |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes |
| Taiwan | Taiwan Chemical Substance Inventory (TCSI) | Yes |

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|---|-------------------------------|
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 08-07-2018

Revision date 08-07-2018

Prepared by Allison Yoon

Version # 02

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