



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	800-556-5074
24-Hour Emergency (CHEMTREC)	800-424-9300 (US)
Website	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	Not available.
Precautionary statement	
Prevention	Use only outdoors or in a well-ventilated area. 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.
Response	Wash hands after handling.
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
calcium carbonate		471-34-1	10 - 20
copper		7440-50-8	3 - 5
amorphous silica		7631-86-9	1 - 3

Chemical name	Common name and synonyms	CAS number	%
dioxosilane		112945-52-5	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.
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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/m3	Respirable fraction.
		15 mg/m3	Total dust.
copper (CAS 7440-50-8)	PEL	1 mg/m3	Dust and mist.
		0.1 mg/m3	Fume.
distillates (petroleum), solvent-refined heavy naphthenic (CAS 64741-96-4)	PEL	5 mg/m3	Mist.
		2000 mg/m3	
graphite (CAS 7782-42-5)	PEL	500 ppm	
		5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

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

Components	Type	Value	Form
amorphous silica (CAS 7631-86-9)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		0.8 mg/m3	
calcium carbonate (CAS 471-34-1)	TWA	20 mppcf	
		5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
dioxosilane (CAS 112945-52-5)	TWA	15 mppcf	Respirable fraction.
		5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		0.8 mg/m3	
graphite (CAS 7782-42-5)	TWA	15 mppcf	
		0.1 mg/m3	Respirable.
talc (not containing asbestos fibers) (CAS 14807-96-6)	TWA	20 mppcf	
		2.4 mppcf	Respirable.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
copper (CAS 7440-50-8)	TWA	1 mg/m3	Dust and mist.
		0.2 mg/m3	Fume.
distillates (petroleum), solvent-refined heavy naphthenic (CAS 64741-96-4)	TWA	5 mg/m3	Inhalable fraction.
graphite (CAS 7782-42-5)	TWA	2 mg/m3	Respirable fraction.
talc (not containing asbestos fibers) (CAS 14807-96-6)	TWA	2 mg/m3	Respirable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
amorphous silica (CAS 7631-86-9)	TWA	6 mg/m ³	
calcium carbonate (CAS 471-34-1)	TWA	5 mg/m ³	Respirable.
		10 mg/m ³	Total
copper (CAS 7440-50-8)	TWA	1 mg/m ³	Dust and mist.
		0.1 mg/m ³	Fume.
dioxosilane (CAS 112945-52-5)	TWA	6 mg/m ³	
distillates (petroleum), solvent-refined heavy naphthenic (CAS 64741-96-4)	Ceiling	1800 mg/m ³	
	STEL	10 mg/m ³	Mist.
graphite (CAS 7782-42-5)	TWA	2.5 mg/m ³	Respirable.
talc (not containing asbestos fibers) (CAS 14807-96-6)	TWA	2 mg/m ³	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

420.0 °F (215.6 °C) Cleveland Open Cup

Evaporation rate

Very slow.

Flammability (solid, gas)

Not available.

Upper/lower flammability or explosive limits**Explosive limit - lower (%)** Not available.**Explosive 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.

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		
Dermal		
LD50	Rabbit	4890 mg/kg
Inhalation		
<i>Vapor</i>		
ATEmix		20.09 mg/l
Oral		
LD50	Rat	108965.5 mg/kg
Components	Species	Test Results
amorphous silica (CAS 7631-86-9)		
Acute		
Dermal		
LD50	Rabbit	> 6000 mg/kg
Oral		
LD50	Rat	> 5000 mg/kg

Components	Species	Test Results
calcium carbonate (CAS 471-34-1)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	6450 mg/kg
dioxosilane (CAS 112945-52-5)		
Acute		
Oral		
LD50	Rat	> 5000 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 silica (CAS 7631-86-9)	3 Not classifiable as to carcinogenicity to humans.	
dioxosilane (CAS 112945-52-5)	3 Not classifiable as to carcinogenicity to humans.	
distillates (petroleum), solvent-refined heavy naphthenic (CAS 64741-96-4)	3 Not classifiable as to carcinogenicity to humans.	
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)		
Not listed.		
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.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

copper (CAS 7440-50-8)

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.

Toxic Substances Control Act (TSCA)

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

Not regulated.

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) Contains component(s) regulated under the Safe Drinking Water Act.

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. 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; Baseoil - unspecified (CAS 64741-96-4)

Talc containing asbestiform fibers (CAS 14807-96-6)

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

COPPER (CAS 7440-50-8)

GRAPHITE (NATURAL) (CAS 7782-42-5)

TALC (NOT CONTAINING ASBESTOS FIBERS) (CAS 14807-96-6)

US. Massachusetts RTK - Substance List

Copper (CAS 7440-50-8)

Graphite (natural) dust (CAS 7782-42-5)

Oil mist (mineral) (CAS 64741-96-4)

Silica, amorphous (CAS 112945-52-5)

Silica, amorphous (CAS 7631-86-9)

Talc (CAS 14807-96-6)

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

Copper (CAS 7440-50-8)

Graphite (CAS 7782-42-5)

Silica (CAS 112945-52-5)

Silica (CAS 7631-86-9)

Talc (Mg₃H₂(SiO₃)₄) (CAS 14807-96-6)

US. Rhode Island RTK

COPPER (FUME, DUST AND MISTS) AS CU. (CAS 7440-50-8)

GRAPHITE (NATURAL) (CAS 7782-42-5)

LUBRICATING OIL (MINERAL) (CAS 64741-96-4)

NUISANCE PARTICULATES (CAS 112945-52-5)

NUISANCE PARTICULATES (CAS 7631-86-9)

TALC (POWDER OR FIBROUS) (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.

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 Industrial Chemicals (AICIS)	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 10-02-2024

Version # 03

Disclaimer 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's 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 (M)SDS consult your supervisor, a health & safety professional, or CRC Industries, Inc..

Revision information Product and Company Identification: Product and Company Identification
Hazard(s) identification: Prevention
Composition / Information on Ingredients: Ingredients
Ecological Information: Ecotoxicity
Regulatory information: Consumer products
GHS: Classification