CRC

SAFETY DATA SHEET

1. Identification

Product identifier Copper Anti-Seize & Lubricating Compound

Other means of identification

Product code 14095

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
 800-521-3168

Assistance

 Customer Service
 800-272-4620

 24-Hour Emergency
 800-424-9300 (US)

(CHEMTREC) 703-527-3887 (International)

Website www.crcindustries.com

2. Hazard(s) identification

Physical hazards Flammable aerosols Category 1

Gases under pressure Liquefied gas

Health hazards Not classified.

Environmental hazards Hazardous to the aquatic environment, acute Category 1

hazard

Hazardous to the aquatic environment, Category 1

long-term hazard

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement Extremely flammable aerosol. Contains gas under pressure; may explode if heated.

Precautionary statement

Prevention Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open

flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Do not apply while equipment is energized. Extinguish all flames, pilot lights and heaters. Vapors will accumulate readily and may ignite. Use only with adequate ventilation; maintain ventilation during use and until all vapors are gone. Open doors and windows or use other means to ensure a fresh

air supply during use and while product is drying. Avoid release to the environment.

Response Wash hands after handling.

14095 Version #: 03 Revision date: 07-19-2016 Issue date: 04-21-2015

Storage Store in a well-ventilated place. Protect from sunlight. Do not expose to temperatures exceeding

50°C/122°F. Exposure to high temperature may cause can to burst.

Disposal Dispose of contents/container in accordance with local/regional/national regulations.

Hazard(s) not otherwise

classified (HNOC)

None known.

Material name: Copper Anti-Seize & Lubricating Compound

3. Composition/information on ingredients

Mixtures			
Chemical name	Common name and synonyms	CAS number	%
distillates (petroleum), hydrotreated heavy naphthenic		64742-52-5	30 - 40
liquefied petroleum gas		68476-86-8	20 - 30
calcium carbonate		1317-65-3	5 - 10
residual oils (petroleum), hydrotreated		64742-57-0	5 - 10
talc (not containing asbestos fibers)		14807-96-6	5 - 10
aluminium, benzoate fatty acids (C=16-18) hydroxy complexes		82980-54-9	3 - 5
copper		7440-50-8	3 - 5

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

protect themselves.

4. First-aid measures

Inhalation	Move to fresh air. If not breathing, give artificial respiration. Call a physician if symptoms develop or persist.
Skin contact	Wash off immediately with plenty of water. Take off contaminated clothing and wash before reuse. Get medical attention if irritation develops and persists.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	Do not induce vomiting. Call a physician immediately. Never give anything by mouth to a victim who is unconscious or is having convulsions.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to

5. Fire-fighting measures

5. Fire-fighting measures	
Suitable extinguishing media	Water fog. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire.
Specific hazards arising from the chemical	Contents under pressure. Pressurized container may rupture when exposed to heat or flame. 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.
Fire-fighting equipment/instructions	In case of fire: Stop leak if safe to do so. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up.
General fire hazards	Extremely flammable aerosol. Contents under pressure. Pressurized container may rupture when exposed to heat or flame.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Emergency personnel need self-contained breathing equipment. Vapors are heavier than air and may spread along floors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. 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

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water. Prevent product from entering drains. Stop the flow of material, if this is without risk. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. 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

Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Use caution around energized equipment. The metal container will conduct electricity if it contacts a live source. This may result in injury to the user from electrical shock and/or flash fire. Avoid contact with eyes, skin, and clothing. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices. For product usage instructions, please see the product label.

Conditions for safe storage, including any incompatibilities

Level 1 Aerosol.

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Components	Туре	Value	Form
calcium carbonate (CAS 1317-65-3)	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), hydrotreated heavy naphthenic (CAS 64742-52-5)	PEL	5 mg/m3	Mist.
		2000 mg/m3	
		500 ppm	
residual oils (petroleum), hydrotreated (CAS 64742-57-0)	PEL	5 mg/m3	Mist.
US. OSHA Table Z-3 (29 CFR 1910.1000) Components	Туре	Value	Form
talc (not containing asbestos fibers) (CAS 14807-96-6)	TWA	0.3 mg/m3	Total dust.
,		0.1 mg/m3	Respirable.
		20 mppcf	
		2.4 mppcf	Respirable.
US. ACGIH Threshold Limit Values			
Components	Туре	Value	Form
copper (CAS 7440-50-8)	TWA	1 mg/m3	Dust and mist.
·		0.2 mg/m3	Fume.
distillates (petroleum), hydrotreated heavy naphthenic (CAS	TWA	5 mg/m3	Inhalable fraction.

US. ACGIH Threshold Limit \ Components	Туре	Value	Form
residual oils (petroleum), hydrotreated (CAS 64742-57-0)	TWA	5 mg/m3	Inhalable fraction.
talc (not containing asbestos fibers) (CAS 14807-96-6)	TWA	2 mg/m3	Respirable fraction
US. NIOSH: Pocket Guide to	Chemical Hazards		
Components	Туре	Value	Form
calcium carbonate (CAS 1317-65-3)	TWA	5 mg/m3	Respirable.
,		10 mg/m3	Total
copper (CAS 7440-50-8)	TWA	1 mg/m3	Dust and mist.
distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	Ceiling	1800 mg/m3	
	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
residual oils (petroleum), hydrotreated (CAS 64742-57-0)	STEL	10 mg/m3	Mist.
,	TWA	5 mg/m3	Mist.
talc (not containing asbestos fibers) (CAS 14807-96-6)	TWA	2 mg/m3	Respirable.
	No biological avecause limits noted f	antha in anadiant/a)	

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.

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. Polyvinyl chloride (PVC).

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. Air monitoring is needed to

determine actual employee exposure levels.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using do not smoke. 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 Liquid.
Form Aerosol.
Color Copper.

Odor Solvent.

Odor threshold Not available.

PH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling 680 °F (360 °C) estimated

range

> 429.8 °F (> 221 °C) Flash point

Not available. **Evaporation rate** Flammability (solid, gas) Not available. Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Not available.

Flammability limit - upper

(%)

Not available.

Vapor pressure 3249.3 hPa estimated

Vapor density Not available.

Relative density 1.06

Negligible. Solubility (water) Not available. Partition coefficient

(n-octanol/water)

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

Not available. **Decomposition temperature** Viscosity (kinematic) Not available. Percent volatile 68 % estimated

10. Stability and reactivity

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

Material is stable under normal conditions. **Chemical stability**

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Heat, flames and sparks. Avoid temperatures exceeding the flash point. Contact with incompatible

materials.

Incompatible materials Strong acids. Strong bases. Strong oxidizing agents.

Hazardous decomposition

products

Carbon oxides.

11. Toxicological information

Information on likely routes of exposure

Inhalation Prolonged or excessive inhalation may cause respiratory tract irritation.

Skin contact Prolonged skin contact may cause temporary irritation. Eye contact Direct contact with eyes may cause temporary irritation. Health injuries are not known or expected under normal use. Ingestion

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

Information on toxicological effects

Acute toxicity

Product	Species	Test Results
Copper Anti-Seize & L	ubricating Compound	
<u>Acute</u>		
Dermal		

LD50 Rabbit 9949 mg/kg calculated

Inhalation

Mist

LC50 Rat 72.4 mg/l, 4 hours calculated

Oral

LD50 Rat 5309 mg/kg calculated

14095 Version #: 03 Revision date: 07-19-2016 Issue date: 04-21-2015

^{*} Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation

Serious eye damage/eye

Prolonged skin contact may cause temporary irritation.

Direct contact with eyes may cause temporary irritation.

irritation

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

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

residual oils (petroleum), hydrotreated (CAS 64742-57-0) 3 Not classifiable as to carcinogenicity to humans.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

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

Based on available data, the classification criteria are not met.

Chronic effects

Ec

Prolonged exposure may cause chronic effects.

12. Ecological information

cotoxicity	Very toxic to	aquatic life with long lasting effects.		
Components		Species	Test Results	
copper (CAS 7440-50-8)				
Aquatic				
Acute				
Crustacea	EC50	Water flea (Daphnia magna)	0.03 mg/l, 48 hours	
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	0.052 mg/l, 96 hours	
distillates (petroleum), hydi	rotreated heavy na	aphthenic (CAS 64742-52-5)		
Aquatic				
Crustacea	EC50	Water flea (Daphnia magna)	1000 mg/l, 48 hours	
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	5000 mg/l, 96 hours	
talc (not containing asbesto	os fibers) (CAS 14	807-96-6)		
Aquatic				
Acute				
Fish	LC50	Zebra danio (Danio rerio)	> 100 g/l, 96 hours	

^{*} Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

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 of waste from residues / unused products

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. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose in accordance with all applicable regulations.

Hazardous waste code Not regulated.

Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number UN1950

UN proper shipping name Aerosols, flammable, Limited Quantity

Transport hazard class(es)

Class 2.1 Subsidiary risk -Label(s) 2.1

Packing group Not applicable.

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Special provisions N82
Packaging exceptions 306
Packaging non bulk None
Packaging bulk None

IATA

UN number UN1950

UN proper shipping name Aerosols, flammable, Limited Quantity

Transport hazard class(es)

Class 2.1 Subsidiary risk -

Packing group Not applicable.

ERG Code 10L

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

, , ,

Passenger and cargo

aircraft

Allowed with restrictions.

Cargo aircraft only

nly Allowed with restrictions.

IMDG

UN number UN1950

UN proper shipping name AEROSOLS, LIMITED QUANTITY

Transport hazard class(es)

Class 2 Subsidiary risk -

Packing group Not applicable.

Environmental hazards

Marine pollutant No.

EmS Not available.

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

15. Regulatory information

US federal regulations This product is 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.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

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.

Material name: Copper Anti-Seize & Lubricating Compound

14095 Version #: 03 Revision date: 07-19-2016 Issue date: 04-21-2015

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

Not regulated.

(SDWA)

Food and Drug

Not regulated.

Administration (FDA)

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 311/312 Immediate Hazard - No Hazard categories Delayed Hazard - No Fire Hazard - Yes

Pressure Hazard - Yes Reactivity Hazard - No

SARA 302 Extremely hazardous substance

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), hydrotreated heavy naphthenic (CAS 64742-52-5)

liquefied petroleum gas (CAS 68476-86-8)

residual oils (petroleum), hydrotreated (CAS 64742-57-0)

No

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

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. Massachusetts RTK - Substance List

calcium carbonate (CAS 1317-65-3)

copper (CAS 7440-50-8)

residual oils (petroleum), hydrotreated (CAS 64742-57-0)

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

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

calcium carbonate (CAS 1317-65-3)

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

copper (CAS 7440-50-8)

US. Rhode Island RTK

copper (CAS 7440-50-8)

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

copper (CAS 7440-50-8)

calcium carbonate (CAS 1317-65-3)

residual oils (petroleum), hydrotreated (CAS 64742-57-0)

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

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

Volatile organic compounds (VOC) regulations

EPA

VOC content (40 CFR 28.1 %

51.100(s))

Consumer products (40 CFR 59, Subpt. C)

Not regulated

State

Consumer products This product is regulated as an Anti-seize Lubricant (aerosol). This product is compliant for use in

all 50 states.

VOC content (CA) 28.1 % **VOC content (OTC)** 28.1 %

SDS US

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
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	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory Yes

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

Issue date04-21-2015Revision date07-19-2016Prepared byAllison Cho

Version # 03

Further information Not available.

HMIS® ratings Health: 2
Flammability: 3

Physical hazard: 0
Personal protection: B

NFPA ratings Health: 2

Flammability: 3 Instability: 0

NFPA ratings

2 0

DisclaimerThe 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 (M)SDS consult your supervisor, a health & safety

professional, or CRC Industries.

Revision InformationThis document has undergone significant changes and should be reviewed in its entirety.

^{*}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).