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 hazardsFlammable aerosolsCategory 1Gases under pressureLiquefied gas

Health hazards Serious eye damage/eye irritation Category 2

Specific target organ toxicity, single exposure Category 3 narcotic effects

Environmental hazards Hazardous to the aquatic environment, Category 3

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. Causes

serious eye irritation. May cause drowsiness or dizziness. Harmful to aquatic life with long lasting

effects.

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. Do not apply while equipment is energized. Pressurized container: Do not pierce or burn, even after use. 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. If you experience any symptoms listed on this label, increase ventilation or leave the area. Avoid breathing mist or vapor. Avoid breathing gas. Wash thoroughly after handling. Wear eye/face protection. Avoid release to the environment.

Response If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison

center/doctor if you feel unwell. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get

medical attention.

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

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

Hazard(s) not otherwise classified (HNOC)

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

None known.

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		68476-85-7	20 - 30
Copper		7440-50-8	5 - 10
Residual oils (petroleum), hydrotreated		64742-57-0	5 - 10
Calcium carbonate		1317-65-3	3 - 5
Talc (not containing asbestos fibers)		14807-96-6	3 - 5

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. Call a POISON CENTER or doctor/physician if you feel unwell.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. 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	Drink plenty of water. Do not induce vomiting. Never give anything by mouth to a victim who is unconscious or is having convulsions. Call a POISON CENTER or doctor/physician if you feel unwell.
Most important symptoms/effects, acute and delayed	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
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	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	Contents under pressure. Pressurized container may explode 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 explode 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. Avoid breathing mist or vapor. Vapors are heavier than air and may spread along floors. Avoid breathing gas. Emergency personnel need self-contained breathing equipment. 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. The product is immiscible with water and will spread on the water surface. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways. 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. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

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 breathing mist or vapor. Avoid breathing gas. Avoid contact with eyes. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Avoid release to the environment. For product usage instructions, please see the product label.

Conditions for safe storage, including any incompatibilities

Level 3 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

upational exposure limits US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)			
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	
Liquefied Petroleum Gas (CAS 68476-85-7)	PEL	1800 mg/m3	
		1000 ppm	
Residual oils (petroleum), hydrotreated (CAS 64742-57-0)	PEL	5 mg/m3	Mist.
US. OSHA Table Z-3 (29 CFR 191)			_
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.

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Components	Туре	Value	Form
Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	TWA	5 mg/m3	Inhalable fraction.
Residual oils (petroleum), hydrotreated (CAS 64742-57-0)	TWA	5 mg/m3	Inhalable fraction.
Solvent naphtha (petroleum), medium aliph. (CAS 64742-88-7)	TWA	200 mg/m3	Non-aerosol.
Talc (not containing asbestos fibers) (CAS 14807-96-6)	TWA	2 mg/m3	Respirable fraction.
US. NIOSH: Pocket Guide to Cher	nical 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.
Liquefied Petroleum Gas (CAS 68476-85-7)	TWA	1800 mg/m3	
Residual oils (petroleum), hydrotreated (CAS 64742-57-0)	STEL	1000 ppm 10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Solvent naphtha (petroleum), medium aliph. (CAS 64742-88-7)	TWA	100 mg/m3	
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.

US ACGIH Threshold Limit Values: Skin designation

Solvent naphtha (petroleum), medium aliph. (CAS Can be absorbed through the skin.

64742-88-7)

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. Provide eyewash station.

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.

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.

Aerosol. Semi-solid gel. **Form** Color Copper. Bronze.

Odor Petroleum. **Odor threshold** Not available. Not available. Hq

> 500 °F (> 260 °C) Melting point/freezing point Initial boiling point and boiling < 600 °F (< 315.6 °C)

range

> 167 °F (> 75 °C) Flash point

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

Flammability limit - lower 0.9

Flammability limit - upper 7

(%)

Vapor pressure 2952.6 hPa estimated

Vapor density > 5 (air = 1)

Relative density 0.87 Insoluble. Solubility (water) Not available. Partition coefficient

(n-octanol/water)

> 500 °F (> 260 °C) **Auto-ignition temperature Decomposition temperature** Not available. Viscosity (kinematic) Not available. Percent volatile 59.3 % 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. Oxidizing agents. Fluorine. Chlorine. Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged or excessive

inhalation may cause respiratory tract irritation.

Skin contact Prolonged skin contact may cause temporary irritation.

Eye contact Causes serious eve irritation.

Ingestion Health injuries are not known or expected under normal use. Ingestion of large amounts may

produce gastrointestinal disturbances including irritation, nausea, and diarrhea.

Material name: Copper Anti-Seize & Lubricating Compound 14095 Version #: 02 Revision date: 07-08-2015 Issue date: 04-21-2015 Symptoms related to the physical, chemical and toxicological characteristics

Headache. May cause drowsiness and dizziness. Nausea, vomiting. Severe eye irritation.

Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Information on toxicological effects

Acute toxicity Narcotic effects.

Product Species Test Results

Copper Anti-Seize & Lubricating Compound

<u>Acute</u>

Dermal

LD50 Rabbit 51840 mg/kg calculated

Oral

LD50 Rat 3775 mg/kg calculated

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye

irritation

Causes serious eye irritation.

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicityNo 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

Not available.

US. National Toxicology Program (NTP) Report on Carcinogens

Not available.

Reproductive toxicity

This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

May cause drowsiness and dizziness.

Specific target organ toxicity -

repeated exposure

Not classified.

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

12. Ecological information

toxicity	Harmful to	o aquatic life with long lasting effects.	
Product		Species	Test Results
Copper Anti-Seize & Lu	ubricating Compou	nd	
Aquatic			
Acute			
Crustacea	EC50	Daphnia	0.9267 mg/l, 48 hours estimated
Fish	LC50	Fish	5.7331 mg/l, 96 hours estimated
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),	hydrotreated heav	y naphthenic (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

Material name: Copper Anti-Seize & Lubricating Compound

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

Components **Test Results Species**

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

Aquatic

Acute

LC50 Fish Zebra danio (Danio rerio) > 100 g/l, 96 hours

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

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

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.

Since emptied containers may retain product residue, follow label warnings even after container is Contaminated packaging

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. Transport information

DOT

UN1950 **UN** number

UN proper shipping name

Transport hazard class(es)

Aerosols, flammable, Limited Quantity

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 306 Packaging exceptions Packaging non bulk None None Packaging bulk

IATA

UN1950 **UN number**

UN proper shipping name Aerosols, flammable, Limited Quantity

Transport hazard class(es)

Class 2.1 Subsidiary risk

Packing group Not applicable.

Environmental hazards No. **ERG Code** 10L

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

Other information

Passenger and cargo

aircraft

Allowed.

Allowed. Cargo aircraft only

IMDG

UN number UN1950

UN proper shipping name AEROSOLS, LIMITED QUANTITY

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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.

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

Not listed.

SARA 304 Emergency release notification

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.

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)

No

Section 311/312 Immediate Hazard - Yes
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)

Liquefied Petroleum Gas (CAS 68476-85-7)

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

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

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

Solvent naphtha (petroleum), medium aliph. (CAS 64742-88-7)

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

Not listed.

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

Calcium carbonate (CAS 1317-65-3)

Liquefied Petroleum Gas (CAS 68476-85-7)

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

Copper (CAS 7440-50-8)

Solvent naphtha (petroleum), medium aliph. (CAS 64742-88-7)

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

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

US. Massachusetts RTK - Substance List

Calcium carbonate (CAS 1317-65-3)

Copper (CAS 7440-50-8)

Liquefied Petroleum Gas (CAS 68476-85-7)

Residual oils (petroleum), hydrotreated (CAS 64742-57-0) Solvent naphtha (petroleum), medium aliph. (CAS 64742-88-7)

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

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

Copper (CAS 7440-50-8)

Calcium carbonate (CAS 1317-65-3) Liquefied Petroleum Gas (CAS 68476-85-7)

Residual oils (petroleum), hydrotreated (CAS 64742-57-0) Solvent naphtha (petroleum), medium aliph. (CAS 64742-88-7) Talc (not containing asbestos fibers) (CAS 14807-96-6)

US. Rhode Island RTK

Copper (CAS 7440-50-8)

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

51.100(s))

30.6 %

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.

Inventory name

 VOC content (CA)
 30.6 %

 VOC content (OTC)
 30.6 %

International Inventories

Country(s) or region

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

^{*}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
 04-21-2015

 Revision date
 07-08-2015

 Prepared by
 Allison Cho

 Version #
 02

Further information Not available.

SDS US

On inventory (yes/no)*

HMIS® ratings Health: 2

Flammability: 3 Physical hazard: 0 Personal protection: B

NFPA ratings

Health: 2 Flammability: 3 Instability: 0

NFPA ratings



Disclaimer

CRC cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. 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 (M)SDS consult your supervisor, a health & safety professional, or CRC Industries.