Material Safety Data Sheet

Section 1: Product & Company Identification

Product Name: **Copper-Coat® Gasket Compound**

Product Number (s): **401504, 401516**

Manufactured By:

CRC Industries, Inc.
885 Louis Drive
Warminster, PA 18974
www.crcindustries.com

General Information	(215) 674-4300
Technical Assistance	(800) 521-3168
Customer Service	(800) 272-8963
24-Hr Emergency (CHEMTREC)	(800) 424-9300

Section 2: Hazards Identification

Emergency Overview

Appearance & Odor: Copper, viscous liquid, hydrocarbon odor

WARNING
Flammable. Vapors Harmful. Skin Irritant.

As defined by OSHA's Hazard Communication Standard, this product is hazardous.

Potential Health Effects:

EYE:	Contact may cause mild eye irritation including stinging, watering and redness.
SKIN:	Skin irritant. Contact may cause redness, itching, burning, and skin damage. Prolonged or repeated contact can worsen irritation by causing drying and cracking of the skin, leading to dermatitis (inflammation).
INHALATION:	Low to moderate degree of toxicity by inhalation. Effects of overexposure may include transient excitation followed by signs of nervous system depression (headache, drowsiness, dizziness, loss of coordination, disorientation and fatigue).
INGESTION:	Low degree of toxicity by ingestion. Main hazard is aspiration. This material can enter lungs during swallowing or vomiting and cause lung inflammation and damage. Swallowing this material may also cause nausea and diarrhea.
CHRONIC EFFECTS:	Exposure to high concentrations of this material may increase the sensitivity of the heart to certain drugs. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.
TARGET ORGANS:	No data available.

Medical Conditions Aggravated by Exposure: skin disorders, respiratory (asthma-like) disorders

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

Section 3: Composition/Information on Ingredients

COMPONENT	CAS NUMBER	% by Wt.
Heptane isomers	various	70 - 80
Synthetic rubber	9003-55-8	10 - 20
Glycerol ester of wood rosin	65997-13-9	5 – 10
Copper	7440-50-8	1 - 5

Section 4: First Aid Measures

Eye Contact: Immediately flush with plenty of water for 15 minutes. Call a physician if irritation persists.

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: Do NOT induce vomiting or give anything by mouth because material can enter the lungs and cause severe lung damage. Seek medical attention immediately.

Note to Physicians: Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to high concentrations of hydrocarbon solvents. The use of other drugs with less arrhythmogenic potential should be considered.

Section 5: Fire-Fighting Measures

Flammable Properties: As defined by OSHA, this product is a Class IB flammable liquid.

Flash Point:	30 F (TCC)	Upper Explosive Limit:	6.7
Autoignition Temperature:	ND	Lower Explosive Limit:	1.2

Suitable Extinguishing Media: Dry chemical, carbon dioxide or foam is recommended.

Products of Combustion: Oxides of carbon, aldehydes, carboxylic acids, formaldehyde

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. Avoid spreading burning liquid with water used for cooling purposes.

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: Eliminate all potential sources of ignition. 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. Recover or absorb spilled material using an absorbent designed for chemical spills. Place used absorbents into proper waste containers.

Section 7: Handling and Storage

Handling Procedures: Open container slowly to relieve any pressure. Do not use on or around any potential sources of ignition or energized equipment. Wash thoroughly after use and before handling food.

Storage Procedures: Keep container tightly closed. Use and store this material in cool, dry, well-ventilated areas away from heat, direct sunlight, hot metal surfaces, and all sources of ignition. Keep away from incompatible material.

Aerosol Storage Level: NA

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines:

	OSHA		ACGIH		OTHER		
COMPONENT	TWA	STEL	TWA	STEL	TWA	SOURCE	UNIT
Heptane isomers	500	NE	400	500	NE		ppm
Synthetic rubber	NE	NE	NE	NE	NE		
Glycerol ester of wood rosin	NE	NE	NE	NE	10	mfg*	mg/m^3
Copper	1	NE	1	ND	NE		mg/m^3
N.E. – Not Established (c) – ceiling (s) – skin (v) – vacated							

* manufacturer's recommendation

Engineering Controls: Area should have ventilation to provide fresh air. Use local exhaust to prevent accumulation of vapors. 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. Use a NIOSH-approved cartridge respirator with an organic vapor cartridge if vapors exceed exposure limits. 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, PVA or Viton®. Also, use full protective clothing if there is prolonged or repeated contact of liquid with skin.

Section 9: Physical and Chemical Properties

Physical State: viscous liquid

Color: copper

Odor: hydrocarbon
Specific Gravity: 0.740
Initial Boiling Point: 195 F
Freezing Point: ND
Vapor Pressure: ND
Vapor Density: > 1 (air = 1)
Evaporation Rate: > 1 (butyl acetate = 1)
Solubility: not soluble in water
pH: NA
Volatile Organic Compounds: wt %: 74.2 g/L: 549 lbs./gal: 4.57

Section 10: Stability and Reactivity

Stability: Stable

Conditions to Avoid: Sources of ignition, temperature extremes

Incompatible Materials: Avoid contact with acids and oxidizers such as chlorine and other halogens, chromates, perchlorates, peroxides and oxygen.

Hazardous Decomposition Products: oxides of carbon, phenolic type compounds; thermal decomposition may product aldehydes, carboxylic acids and formaldehyde

Possibility of Hazardous Reactions: 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 EFFECTS

Component	Test	Result	Route	Species
n-heptane	LD50	103 g/m^3/4H	Inhalation	Rat
n-heptane	LD50	> 15 g/kg	Oral	Mouse

CHRONIC EFFECTS

Carcinogenicity:

	Component	Result
OSHA:	none listed	
IARC:	none listed	
NTP:	none listed	

Mutagenicity: no information available

Other: none

Section 12: Ecological Information

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

Ecotoxicity:	n-heptane - 24 Hr EC50 Daphnia magna: >10 mg/L copper - 96 Hr EC50 water flea: 10 µg/L
Persistence / Degradability:	No information available
Bioaccumulation / Accumulation:	No information available
Mobility in Environment:	No information available

Section 13: Disposal Considerations

Disposal: This product is a RCRA hazardous waste for the characteristic of ignitability: D001 (See 40 CFR Part 261.20 – 261.33) Empty containers may be recycled.

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

Section 14: Transport Information

Proper shipping description:

US DOT (ground): Consumer Commodity, ORM-D

Special Provisions: Marine pollutant (copper)

Section 15: Regulatory Information

U.S. Federal

Toxic Substances Control Act (TSCA):

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

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):

Reportable Quantities (RQ's) exist for the following ingredients: None

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	Yes
Reactive Hazard	No
Release of Pressure	No
Acute Health Hazard	Yes
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 (2%)

Clean Air Act:

Section 112 Hazardous Air Pollutants (HAPs): None

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: toluene (0.005%)

State Right to Know:

New Jersey:	142-82-5, 110-82-7, 7440-50-8
Pennsylvania:	142-82-5, 110-82-7, 7440-50-8
Massachusetts:	142-82-5, 110-82-7, 7440-50-8
Rhode Island :	142-82-5, 110-82-7, 7440-50-8

Additional Regulatory Information: None

Section 16: Other Information

NFPA:	Health:	2	Flammability:	3	Reactivity:	0	
HMIS:	Health:	2	Flammability:	3	Reactivity:	0	PPE: B

Prepared By: Michelle Rudnick
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Changes since last revision: MSDS reformatted in accordance with ANSI Z400.1-2004

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.

CAS:	Chemical Abstract Service	NA:	Not Applicable
ppm:	Parts per Million	ND:	Not Determined
TCC:	Tag Closed Cup	NE:	Not Established
PMCC:	Pensky-Martens Closed Cup	g/L:	grams per Liter
PPE:	Personal Protection Equipment	lbs./gal:	pounds per gallon
TWA:	Time Weighted Average	STEL:	Short Term Exposure Limit
OSHA:	Occupational Safety and Health Administration		
ACGIH	American Conference of Governmental Industrial Hygienists		
NIOSH	National Institute of Occupational Safety & Health		