Section 1: Product & Company Identification

Product Name: Copper-Coat® Gasket Compound

Product Number (s): 401504, 401516

Manufactured By:
CRC Industries, Inc. General Information (215) 674-4300
885 Louis Drive Technical Assistance (800) 521-3168
Warminster, PA 18974 Customer Service (800) 272-8963
www.crcindustries.com 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

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>CAS NUMBER</th>
<th>% by Wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heptane isomers</td>
<td>various</td>
<td>70 - 80</td>
</tr>
<tr>
<td>Synthetic rubber</td>
<td>9003-55-8</td>
<td>10 - 20</td>
</tr>
<tr>
<td>Glycerol ester of wood rosin</td>
<td>65997-13-9</td>
<td>5 – 10</td>
</tr>
<tr>
<td>Copper</td>
<td>7440-50-8</td>
<td>1 - 5</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point:</td>
<td>30 F (TCC)</td>
</tr>
<tr>
<td>Autoignition Temperature:</td>
<td>ND</td>
</tr>
<tr>
<td>Upper Explosive Limit:</td>
<td>6.7</td>
</tr>
<tr>
<td>Lower Explosive Limit:</td>
<td>1.2</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>OSHA</th>
<th>ACGIH</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TWA</td>
<td>STEL</td>
<td>TWA</td>
</tr>
<tr>
<td>Heptane isomers</td>
<td>500</td>
<td>NE</td>
<td>400</td>
</tr>
<tr>
<td>Synthetic rubber</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Glycerol ester of wood rosin</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Copper</td>
<td>1</td>
<td>NE</td>
<td>1</td>
</tr>
</tbody>
</table>

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
Product Name: Copper-Coat® Gasket Compound
Product Number(s): 401504, 401516

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

<table>
<thead>
<tr>
<th>Component</th>
<th>Test</th>
<th>Result</th>
<th>Route</th>
<th>Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>n-heptane</td>
<td>LD50</td>
<td>103 g/m³/4H</td>
<td>Inhalation</td>
<td>Rat</td>
</tr>
<tr>
<td>n-heptane</td>
<td>LD50</td>
<td>&gt; 15 g/kg</td>
<td>Oral</td>
<td>Mouse</td>
</tr>
</tbody>
</table>

CHRONIC EFFECTS

Carcinogenicity:

<table>
<thead>
<tr>
<th>Component</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSHA:</td>
<td>none listed</td>
</tr>
<tr>
<td>IARC:</td>
<td>none listed</td>
</tr>
<tr>
<td>NTP:</td>
<td>none listed</td>
</tr>
</tbody>
</table>

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
**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
Consumer Product Safety Act General Conformity Certification: This product was evaluated by CRC Industries, Inc., and is certified to be in compliance with the provisions of the Consumer Product Safety Act, the Federal Hazardous Substances Act and the Poison Prevention Packaging Act, as applicable. This product was manufactured at the location listed in Section 1 of this MSDS. The date of manufacture is stamped on the product container. No testing is required to certify compliance with the above 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
CRC #: 915
Revision Date: 11/10/2008

Changes since last revision: Section 15: CPSA Certification added

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