



# Material Safety Data Sheet

## Section 1: Product & Company Identification

**Product Name:** Copper Block Weld™ Permanent Block and Radiator Sealer

**Product Number (s):** 05371

**Manufactured By:**

CRC Industries, Inc.  
885 Louis Drive  
Warminster, PA 18974  
[www.crcindustries.com](http://www.crcindustries.com)

|                            |                |
|----------------------------|----------------|
| General Information        | (215) 674-4300 |
| Technical Assistance       | (800) 521-3168 |
| Customer Service           | (800) 272-4620 |
| 24-Hr Emergency (CHEMTREC) | (800) 424-9300 |

## Section 2: Hazards Identification

### Emergency Overview

Appearance & Odor: colorless liquid with metallic copper suspensions, slight soap odor

### WARNING

Harmful if Swallowed.

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

### Potential Health Effects:

- EYE:** May cause irritation to eyes, causing pain, redness and tearing. If not flushed quickly, may cause serious vision impairment, including permanent damage.
- SKIN:** May cause mild skin irritation.
- INHALATION:** Not expected to cause adverse health effects by inhalation.
- INGESTION:** May cause irritation of the mouth, throat, esophagus and stomach. May cause stomach distress, nausea, and vomiting.
- CHRONIC EFFECTS:** None known
- TARGET ORGANS:** Unknown

**Medical Conditions Aggravated by Exposure:** Persons with pre-existing skin conditions may be more sensitive to this product.

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

---

### **Section 3: Composition/Information on Ingredients**

| <b>COMPONENT</b> | <b>CAS NUMBER</b> | <b>% by Wt.</b> |
|------------------|-------------------|-----------------|
| Sodium silicate  | 1344-09-8         | 30 – 40         |
| Copper fines     | 7440-50-8         | < 10            |

---

### **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. Rinse mouth out. Obtain medical attention immediately. Never give anything by mouth to an unconscious person.
- Note to Physicians:* Treat symptomatically.

---

### **Section 5: Fire-Fighting Measures**

- Flammable Properties:** This product is not flammable.
- |                           |            |                        |    |
|---------------------------|------------|------------------------|----|
| Flash Point:              | None (TCC) | Upper Explosive Limit: | NA |
| Autoignition Temperature: | ND         | Lower Explosive Limit: | NA |
- Suitable Extinguishing Media:** Use agents appropriate for surrounding fire.
- Products of Combustion:** None
- 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.

---

### **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:** Dike area to contain spill. Ventilate the area with fresh air. If in confined space, clean-up workers should wear appropriate respiratory protection. Recover or absorb spilled material using an absorbent designed for chemical spills. Neutralize liquid material with any dilute inorganic acid. Place used absorbents into proper waste containers.

**Product Name: Copper Block Weld™ Permanent Block and Radiator Sealer**  
**Product Number (s): 05371**

---

---

**Section 7: Handling and Storage**

Handling Procedures: Avoid prolonged or repeated contact with skin or clothing. Wash hands after using and before handling food products. Do not re-use containers.

Storage Procedures: Store in a cool dry area out of direct sunlight. Keep container closed and upright when not in use. Do not store near incompatible materials. Keep out of reach of children.

Aerosol Storage Level: NA

---

**Section 8: Exposure Controls/Personal Protection**

Exposure Guidelines:

| COMPONENT   | OSHA |      | ACGIH |      | OTHER |        | UNIT              |
|---|------|------|-------|------|-------|--------|-------------------|
|   | TWA  | STEL | TWA   | STEL | TWA   | SOURCE |                   |
| Sodium silicate   | NE   | NE   | NE    | NE   | NE    |        |                   |
| Copper fines  | 1.0  | NE   | 1.0   | NE   | NE    |        | mg/m <sup>3</sup> |
| N.E. – Not Established (c) – ceiling (s) – skin (v) – vacated |      |      |       |      |       |        |                   |

Engineering Controls: Area should have ventilation to provide fresh air. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at the source, preventing dispersion into the general work area. 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.

Eye/face Protection: For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

Skin Protection: Persons with skin sensitivities should use protective gloves such as natural rubber or latex. Also, use full protective clothing if there is prolonged or repeated contact of liquid with skin.

---

**Section 9: Physical and Chemical Properties**

Physical State: liquid  
Color: colorless with metallic copper suspension  
Odor: slight soapy  
Specific Gravity: 1.4  
Initial Boiling Point: 212 – 215 F  
Freezing Point: ND  
Vapor Pressure: ND  
Vapor Density: ND (air = 1)  
Evaporation Rate: slow  
Solubility: soluble in water  
pH: 11.0 – 11.5  
Volatile Organic Compounds: wt %: 0 g/L: 0 lbs./gal: 0

**Product Name: Copper Block Weld™ Permanent Block and Radiator Sealer**  
**Product Number (s): 05371**

---

---

## Section 10: Stability and Reactivity

Stability: Stable

Conditions to Avoid: None

Incompatible Materials: Contact with strong acids may produce rapid neutralization reaction with significant heat liberation. Contact with ethylene or propylene glycol in an automotive cooling system will produce a semi-solid material which may block passages within the cooling system and cause engine overheating.

Hazardous Decomposition Products: None known

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

| <u>Component</u> | <u>Test</u> | <u>Result</u> | <u>Route</u> | <u>Species</u> |
|------------------|-------------|---------------|--------------|----------------|
| sodium silicate  | LD50        | 1960 mg/kg    | Oral         | Rat            |
| sodium silicate  | LD50        | > 4640 mg/kg  | Dermal       | Rabbit         |

### CHRONIC EFFECTS

Carcinogenicity:

|       | <u>Component</u> | <u>Result</u> |
|-------|------------------|---------------|
| 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: No information available  
Persistence / Degradability: No information available  
Bioaccumulation / Accumulation: No information available  
Mobility in Environment: No information available

---

## Section 13: Disposal Considerations

Disposal: This product is not a RCRA hazardous waste as packaged. (See 40 CFR Part 261.20 – 261.33)

**Product Name: Copper Block Weld™ Permanent Block and Radiator Sealer**  
**Product Number (s): 05371**

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): Not regulated

Special Provisions: None

---

---

**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: copper (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.**

Superfund Amendments Reauthorization Act (SARA) Title III:

Section 302 Extremely Hazardous Substances (EHS): None

Section 311/312 Hazard Categories:

|                       |     |
|-----------------------|-----|
| Fire Hazard           | No  |
| 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 (<10%)

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: NONE

State Right to Know:

**Product Name: Copper Block Weld™ Permanent Block and Radiator Sealer**  
**Product Number (s): 05371**

---

New Jersey: 7440-50-8  
Pennsylvania: 7440-50-8  
Massachusetts: 7440-50-8  
Rhode Island : 7440-50-8

**Additional Regulatory Information:** None

---

---

**Section 16: Other Information**

NFPA: Health: 2 Flammability: 0 Reactivity: 0  
HMIS: Health: 2 Flammability: 0 Reactivity: 0 PPE: A

Prepared By: Michelle Rudnick  
CRC #: 05371  
Revision Date: 03/02/2010

Changes since last revision: Minor revisions in all sections

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        |           |                           |