



SAFETY DATA SHEET

1. Identification

Product identifier Copper Block Weld™ Permanent Block & Radiator Sealer

Other means of identification

Product code 05371

Recommended use Sealant

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 Assistance 800-521-3168

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 Not classified.

Health hazards Not classified.

Environmental hazards Hazardous to the aquatic environment, acute hazard Category 1

Hazardous to the aquatic environment, long-term hazard Category 2

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Precautionary statement

Prevention Use with adequate ventilation. 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 Collect spillage.

Storage Store away from incompatible materials.

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

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information

60.42% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 60.42% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Sodium silicate		1344-09-8	30 - 40
Copper		7440-50-8	< 1

Chemical name	Common name and synonyms	CAS number	%
Sodium nitrite		7632-00-0	< 1

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

4. First-aid measures

Inhalation	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. If breathing stops, provide artificial respiration. Call a physician if symptoms develop or persist.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation develops and persists. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. 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	Treat symptomatically.
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	Powder. Foam. Carbon dioxide (CO ₂). Water spray. Dry sand.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool and to knock down vapors which may result from product decomposition. Prevent fire extinguishing water from contaminating surface water or the ground water system.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Remove all possible sources of ignition in the surrounding area. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. 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	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. Small Spills: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Sweep up and shovel into suitable containers for disposal. Clean surface thoroughly to remove residual contamination.
Environmental precautions	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. 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	Provide adequate ventilation. Avoid prolonged exposure. Wear appropriate personal protective equipment. Wash hands after handling and before eating. Avoid release to the environment. Observe good industrial hygiene practices. Use care in handling/storage. For product usage instructions, please see the product label.
Conditions for safe storage, including any incompatibilities	Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Copper (CAS 7440-50-8)	PEL	1 mg/m ³ 0.1 mg/m ³	Dust and mist. Fume.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Copper (CAS 7440-50-8)	TWA	1 mg/m ³	Dust and mist.

Biological limit values

No biological exposure limits noted for the ingredient(s).

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: Rubber (natural, latex).

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

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 Liquid.

Color Copper.

Odor Odorless.

Odor threshold Not available.

pH 11 - 11.5

Melting point/freezing point 519.8 °F (271 °C) estimated

Initial boiling point and boiling range 212 - 215.6 °F (100 - 102 °C)

Flash point None (Tag Closed Cup)

Evaporation rate Slow.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Vapor pressure 0.00001 hPa estimated

Vapor density Not available.

Relative density 1.3 - 1.4

Solubility (water) > 99 %

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity (kinematic)	Not available.
Percent volatile	Not available.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials. Sunlight. Extremely high or low temperatures.
Incompatible materials	Strong acids. Strong bases.
Hazardous decomposition products	Carbon oxides.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause irritation or asthma-like symptoms.
Skin contact	May cause slight skin irritation.
Eye contact	May cause slight eye irritation.
Ingestion	May cause gastrointestinal irritation, including nausea and vomiting.

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

Information on toxicological effects

Acute toxicity Not available.

Product	Species	Test Results
Copper Block Weld™ Permanent Block & Radiator Sealer		
Acute		
Inhalation		
LC50	Rat	550 mg/l, 4 Hours estimated
Oral		
LD50	Rat	2536 mg/kg estimated

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

Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary 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.
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	Not an aspiration hazard.
Chronic effects	Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Product	Species		Test Results
Copper Block Weld™ Permanent Block & Radiator Sealer			
Aquatic			
<i>Acute</i>			
Crustacea	EC50	Daphnia	6.95 mg/l, 48 hours estimated
Fish	LC50	Fish	42.7795 mg/l, 96 hours estimated
Components			
Species			
Test Results			
Copper (CAS 7440-50-8)			
Aquatic			
<i>Acute</i>			
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
Sodium nitrite (CAS 7632-00-0)			
Aquatic			
Crustacea	EC50	Greasyback shrimp (Metapenaeus ensis)	16.14 - 26.61 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	0.15 - 0.25 mg/l, 96 hours
Sodium silicate (CAS 1344-09-8)			
Aquatic			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	22.94 - 49.01 mg/l, 48 hours
Fish	LC50	Western mosquitofish (Gambusia affinis)	2320 mg/l, 96 hours
<i>Acute</i>			
Fish	LC50	Western mosquitofish (Gambusia affinis)	2320 mg/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. 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	Not regulated as dangerous goods.
IATA	Not regulated as dangerous goods.
IMDG	Not regulated as dangerous goods.

15. Regulatory information

US federal regulations	This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
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TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Sodium nitrite (CAS 7632-00-0) 1.0 % One-Time Export Notification only.

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)

Sodium nitrite (CAS 7632-00-0)

CERCLA Hazardous Substance List (40 CFR 302.4)

Copper (CAS 7440-50-8)

Listed.

Sodium nitrite (CAS 7632-00-0)

Listed.

CERCLA Hazardous Substances: Reportable quantity

Copper (CAS 7440-50-8)

5000 LBS

Sodium nitrite (CAS 7632-00-0)

100 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 (SDWA) Not regulated.

Food and Drug Administration (FDA) Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 311/312

Hazard categories

Immediate Hazard - No

Delayed Hazard - No

Fire Hazard - No

Pressure Hazard - No

Reactivity Hazard - No

SARA 302 Extremely hazardous substance

No

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)

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

Copper (CAS 7440-50-8)

Sodium nitrite (CAS 7632-00-0)

US. Massachusetts RTK - Substance List

None.

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

Sodium nitrite (CAS 7632-00-0)

Copper (CAS 7440-50-8)

US. Rhode Island RTK

Copper (CAS 7440-50-8)

Sodium nitrite (CAS 7632-00-0)

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)) 0 %

Consumer products Not regulated
(40 CFR 59, Subpt. C)

State

VOC content (CA) 0 %

VOC content (OTC) 0 %

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
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	Yes
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	04-10-2015
Prepared by	Allison Cho
Version #	01
Further information	Not available.
HMIS® ratings	Health: 1 Flammability: 1 Physical hazard: 0 Personal protection: B
NFPA ratings	Health: 1 Flammability: 1 Instability: 0

NFPA ratings



Disclaimer

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