



SAFETY DATA SHEET

WARCO RADIATOR SEALER AND STOP LEAK

V#060314

SECTION 1: Product and Company Identification

WARCO Products, Inc
12505 SW HERMAN RD.
TUALATIN, OR 97062
503-783-0250
www.warcopro.com

Product Name	Warco Radiator Sealer and Stop Leak
Product Code	423
CAS Numbers	7732-18-5, 8013-18-3, 1302-78-9, 14808-60-7, 2634-33-5, 2682-20-4, 26172-55-4
Synonyms	Cooling System Sealer and Stop Leak
Generic Chemical Name	Aqueous slurry of sealing and stop leak materials
Product Type	Substance
Transportation Emergency Phone No.	Chemtrec: 1-800-424-9300 (24 HRS)
West Penn Emergency Phone No.	814-726-1780
MSDS E-Mail	sales@warcopro.com

SECTION 2: Hazards identification

Appearance	Aqueous brown slurry
Odor	Slight earthy odor
Signal Word	CAUTION! May cause skin irritation with prolonged contact. May cause mild eye irritation May cause respiratory tract irritation
OSHA Regulatory Status	Automobile cooling system – consumer product
Route of Exposure	Dermal, Inhalation, Ingestion
Precautions	Avoid eye, skin contact
Inhalation	Avoid breathing dust/fume/gas/mist/vapors/spray. Keep container tightly closed. Use only with adequate ventilation.
Eyes	Avoid contact with eyes. Wash thoroughly after handling.
Skin	Avoid contact with skin and clothing. Wash thoroughly after handling.
Medical Conditions Aggravated by Exposure	Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product
Chronic Effects	See Section 11 for complete health hazard information
Environmental Effects	See Section 12 for complete ecological information

SECTION 3: Composition/Information on Ingredients

CAS No.	Component	Percent
7732-18-5	Dihydrogen Oxide	85-95%
8031-18-3	Magnesium Aluminum Silicate (May contain up to 10% of crystalline silica-quartz)	0.5-2%



1302-78-9	Bentonite Clay(may contain up to 10% of crystalline silica-quartz)	5-10%
14808-60-7	Quartz (From Bentonite Clay, and Magnesium Aluminum Silicate)	0-2%
Proprietary	Non-hazardous ingredients	>1%
2634-33-5	1,2-Benzothiazol-3(2H)-one	<0.017%
2682-20-4	2-Methylisothiazol-3(2H)-one	<0.01%
26172-55-4	5-Chloro-2-methyl-2H-isothiazol-3-one	<0.01%

Component Regulatory Information This product may be regulated, have exposure limits or other information identified as the following: (See Section 8)

SECTION 4: First aid measures

Eyes	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation persists, seek medical attention.
Skin	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. If irritation persists, seek medical attention.
Inhalation	No harmful effects expected. If symptoms of exposure occur, remove to fresh air.
Ingestion	If swallowed, get immediate medical advice by calling a Poison Control Center, or emergency room. If necessary, take victim and product container to nearest emergency treatment center. Do not attempt to give anything by mouth to an unconscious person.
Note to Physicians	Treatment of overexposure should be directed at the control of symptoms and clinical conditions.

SECTION 5: Fire-fighting measures

Flammable Properties

Not combustible

Extinguishing Media

Use dry chemical, CO₂, water spray (FOG) or foam on surrounding fire

Specific Hazards Arising from Chemical

Elevated temperatures could potentially lead to the formation of irritating fumes and vapors. .

Protective Equipment and Precautions for Firefighters

If other or unknown materials are present, fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode

SECTION 6: Accidental release measures

Personal Precautions

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.



Environmental Precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution.

Methods for Containment

Stop leak if without risk.

Methods for Cleanup

Move containers from spill area. Approach release from upwind. Absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

SECTION 7: Handling and storage

Handling Procedures

Shake or stir product container well before using. Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Use non-sparking tools.

Shipping and Storing Procedures

Store in accordance with local regulations. Store in a segregated and approved area. Keep in the original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials. Do not store in unlabeled containers. Store and use away from heat, sparks, open flame or any other ignition source. Do not reuse container.

Warnings

- Do not ingest.
- Avoid eye contact. Avoid contact with skin or clothing.
- Avoid breathing vapors.
- Use with adequate ventilation.
- Wash exposed skin thoroughly with soap and water after use.
- Keep container away from heat, sparks, flames and other sources of ignition.
- Keep container closed when not in use.
- Store in a cool, dry area away from heat, oxidizers, and all sources of ignition.
- Empty containers retain product residue. Do not reuse empty containers.

SECTION 8: Exposure controls/personal protection

Product Exposure Limits

ACGIH TLV:	TWA:	N/A ppm	TWA:	5 mg/m3	STEL:	N/A ppm	STEL:	10 mg/m3
OSHA PEL:	TWA:	N/A ppm	TWA:	5 mg/m3	STEL:	N/A ppm	STEL:	N/A mg/m3
NIOSH REL:	TWA:	N/A ppm	TWA	N/A mg/m3	STEL:	N/A ppm	STEL:	N/A mg/m3
ACGIH TLV:	TWA:	N/A ppm	TWA:	N/A mg/m3	STEL:	N/A ppm	STEL:	N/A mg/m3
OSHA PEL:	TWA:	N/A ppm	TWA:	N/A mg/m3	STEL:	N/A ppm	STEL:	N/A mg/m3
NIOSH REL:	TWA:	N/A ppm	TWA	N/A mg/m3	STEL:	N/A ppm	STEL:	N/A mg/m3
ACGIH TLV:	TWA:	N/A ppm	TWA:	N/A mg/m3	STEL:	N/A ppm	STEL:	N/A mg/m3
OSHA PEL:	TWA:	N/A ppm	TWA:	N/A mg/m3	STEL:	N/A ppm	STEL:	N/A mg/m3
NIOSH REL:	TWA:	N/A ppm	TWA	N/A mg/m3	STEL:	N/A ppm	STEL:	N/A mg/m3
ACGIH TLV:	TWA:	N/A ppm	TWA:	N/A mg/m3	STEL:	N/A ppm	STEL:	N/A mg/m3
OSHA PEL:	TWA:	N/A ppm	TWA:	N/A mg/m3	STEL:	N/A ppm	STEL:	N/A mg/m3
NIOSH REL:	TWA:	N/A ppm	TWA	N/A mg/m3	STEL:	N/A ppm	STEL:	N/A mg/m3

**Engineering Controls**

Material should be handled in enclosed vessels and equipment. Use only in adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Eye/Face Protection
Skin Protection**

Chemical goggles or face shield.

Chemical resistant, impervious gloves complying with an approved standard should be worn at all times. Coveralls, apron, and boots as necessary to minimize contact.

Respiratory Protection

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicated this is necessary. Respirator selection must be based on known or anticipated exposure levels.

General Hygiene

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing.

SECTION 9: Physical and chemical properties

Appearance	Brown slurry	Vapor Pressure (mm Hg at 20°C)	Not Determined
pH	7-11	Water Soluble	Yes
Physical State	Liquid	Specific Gravity (15.6°C)	1.05
Boiling Point (°F)	212	Density (lbs/gal)	8.5 8.7
		Freezing Point(°F)	32
Viscosity, cSt (40°C)	Not Determined	Percent Volatile	<1

SECTION 10: Stability and reactivity**Stability**

Stable under normal conditions

Polymerization

No polymerization

Incompatibility

Strong acids and oxidizing materials

Conditions to Avoid

Excessive heat

Hazardous Decomposition Products

Smoke, and other products of incomplete combustion

SECTION 11: Toxicological information**Acute Exposure****Respiratory Irritation**

May cause respiratory tract irritation. If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract.

Eye Irritation

May cause eye irritation. Vapors formed from heating may cause eye irritation.

Skin Irritation

May cause skin irritation. Prolonged or repeated direct exposure to the skin may result in symptoms of irritation and redness.

Sensitization

Not expected to cause skin or respiratory sensitization.

Component Analysis – LD50 / LC50



Acute Toxicity Estimate (ATE) Values for Product:

Inhalation LC50 Rat	Not established mg/L 1 HR (NE)
Oral LD50 Rat	NE mg/kg
Dermal LD50 Rabbit	NE mg/kg
Chronic Exposure Target Organ Effects	No data available to indicate product or components present at greater than 1% are chronic health hazards.
Carcinogenicity	The components greater than 0.1% are not listed as carcinogenic by IARC, NTP, ACGIH, or OSHA..
Mutagenicity	No data available to indicate product or any components present at greater than .1% are mutagenic or genotoxic
Reproductive Toxicity	No data available to indicate either product or components present at greater than .1% may cause reproductive toxicity.
Teratogenicity	No data available to indicate product or any components contained at greater than .1% may cause birth defects

SECTION 12: Ecological information

Component Analysis- Ecotoxicity – Aquatic Life

Duration/Test/Species	Concentration/Conditions
96-h/LC50/Rainbow Trout	Not Available mg/L
96-h/LC50/Fathead Minnow	Not Available mg/L
96-h/LC50/Fathead Minnow	Not Available Mg/L

Acute Toxicity	May be toxic to animal/aquatic life.
Chronic Toxicity	Do not dispose of in waterways or wetlands.
Degradability	Not determined
Bioaccumulation	Not determined
Soil Mobility	Not determined
Photodegradation	Not determined
Partition Coefficient (log Kow)	Not determined
Stability in Water	Stable to hydrolysis

SECTION 13: Disposal considerations

Disposal Instructions

The generation of waste should be avoided or minimized wherever possible. Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.

SECTION 14: Transport information

Emergency Response Guide No.	128	<i>North American Emergency Response Guide Book</i>
UN Number	Shipping Name (technical name)	Hazard Class
U.S. DOT Bulk		Packing Group
U.S. DOT Non-Bulk	Not regulated	Not regulated



SECTION 15: Regulatory information

SARA Extremely Hazardous Substances (Sections 302 & 304)

This product does not contain greater than 1% of any “extremely hazardous substances” listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

SARA Section 313

This product does not contain greater than 1.0% of the 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.

SARA Section 311 & 312 Classifications Acute Hazard

Chronic Hazard

N/A

Fire Hazard

N/A

Reactivity Hazard

N/A

N/A

Global Chemical

Inventories Inventory	Component
	All components
US TSCA	Present
EU	
Japan	
Australia	
New Zealand	
Canada	
Switzerland	
Korea	
Philippines	
China	
Taiwan	

SECTION 16: Other information

US NFPA Ratings

Health	Fire	Reactivity
0	0	0

HMIS Ratings

Health	Fire	Reactivity
1	0	0

Precautionary Labels

Signal Word

CAUTION!

May cause skin irritation

May cause eye irritation

May cause respiratory tract irritation



Preparation/Revision Date

6/3/2014

Revision Reason

Added Sec. 14 Wording

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

Always consult your owner's manual for correct application of oil to be used.

HANDLING AND SAFETY INFORMATION – Refer to WARCO (MSDS) Material Safety Data Sheets for proper handling and safety information. Use the same care and handling as for any petroleum product. Nothing herein shall be deemed to constitute a warranty, express or implied, that said information or data are correct or that the products described are merchantable or fit for a particular purpose, or that said information, data or products can be used without infringing patents of third parties

