



SAFETY DATA SHEET

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Revision Date: 02/13/2013

Print Date: 3/6/2014

MSDS Number: R0296917

Version: 1.9

Zerex™ RADIATOR SUPER SEALER
ZXC03

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Ashland	Regulatory Information Number	1-800-325-3751
P.O. Box 2219	Telephone	614-790-3333
Columbus, OH 43216	Emergency telephone number	1-800-ASHLAND (1-800-274-5263)

Product name Zerex™ RADIATOR SUPER SEALER

Product code ZXC03

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: liquid

NOTICE: WHILE THIS MATERIAL HAS A LOW LEVEL OF TOXICITY, GOOD INDUSTRIAL HYGIENE PRACTICES ARE ENCOURAGED TO MINIMIZE EXPOSURE.

Potential Health Effects

Exposure routes

Inhalation, Skin absorption, Skin contact, Eye Contact, Ingestion

Eye contact

May cause mild eye irritation. Symptoms include stinging, tearing, and redness.

Skin contact

May cause slight skin irritation.

Ingestion

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.

Inhalation

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It is possible to breathe this material under certain conditions of handling and use (for example, during heating, spraying, or stirring). Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.).

Aggravated Medical Condition

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: lung (for example, asthma-like conditions)

Symptoms

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: irritation (nose, throat, airways)

Target Organs

No data

Carcinogenicity

The International Agency for Research on Cancer (IARC) and the National Toxicology Program (NTP) have determined that there is sufficient evidence in humans for the carcinogenicity of inhaled crystalline silica in the form of quartz or cristobalite. In addition, IARC has determined that there is sufficient evidence for the carcinogenicity of quartz and cristobalite in experimental animals. Among individuals with silicosis, lung cancer occurs more frequently in those who smoke.

Reproductive hazard

There are no data available for assessing risk to the fetus from maternal exposure to this material.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components	CAS-No. / Trade Secret No.	Concentration
BENTONITE ROCK CLAY	1302-78-9	>=1.5-<5%
QUARTZ (SiO ₂)	14808-60-7	>=0.1-<0.5%
SILICA - CRYSTALLINE, TRIDYMITE	15468-32-3	>=0.1-<0.5%

4. FIRST AID MEASURES

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Eyes

If symptoms develop, move individual away from exposure and into fresh air. Flush eyes gently with water while holding eyelids apart. If symptoms persist or there is any visual difficulty, seek medical attention.

Skin

Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

Ingestion

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Notes to physician

Hazards: No information available.

Treatment: No information available.

5. FIREFIGHTING MEASURES

Suitable extinguishing media

Dry chemical, Carbon dioxide (CO₂), Water spray

Hazardous combustion products

carbon dioxide and carbon monoxide

Precautions for fire-fighting

Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning material with water used for cooling purposes.

NFPA Flammable and Combustible Liquids Classification

not applicable

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6. ACCIDENTAL RELEASE MEASURES**Personal precautions**

For personal protection see section 8. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.

Environmental precautions

Prevent spreading over a wide area (e.g. by containment or oil barriers). Do not let product enter drains. Do not flush into surface water or sanitary sewer system.

Methods for cleaning up

Keep in suitable, closed containers for disposal. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

Other information

Comply with all applicable federal, state, and local regulations.

7. HANDLING AND STORAGE**Handling**

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed.

Storage

Store in a cool, dry, ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Exposure Guidelines**

BENTONITE ROCK CLAY		1302-78-9	
CELLULOSE		9004-34-6	
ACGIH	time weighted average	10 mg/m3	
NIOSH	Recommended exposure limit (REL):	10 mg/m3	Total
NIOSH	Recommended exposure	5 mg/m3	Respirable.

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OSHA Z1	limit (REL):		
OSHA Z1	Permissible exposure limit	5 mg/m3	Respirable fraction.
	Permissible exposure limit	15 mg/m3	Total dust.

General advice

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Exposure controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Eye protection

Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed into eyes.

Skin and body protection

Wear normal work clothing including long pants, long-sleeved shirts and foot covering to prevent direct contact of the product with the skin. Launder clothing before reuse. If skin irritation develops, contact your facility health and safety professional or your local safety equipment supplier to determine the proper personal protective equipment for your use. Wear resistant gloves (consult your safety equipment supplier).

Respiratory protection

Respiratory protection is not required under normal conditions of use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	liquid
Boiling point/boiling range	212 °F / 100 °C @ 1,013.33 hPa Calculated Phase Transition Liquid/Gas
Flash point	not applicable
Vapour pressure	23.333 hPa @ 68 °F / 20 °C Calculated Vapor Pressure

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10. STABILITY AND REACTIVITY

Stability

Stable.

Conditions to avoid

None known.

Incompatible products

Acids, Bases, Oxidizing agents

Hazardous decomposition products

carbon dioxide and carbon monoxide

Hazardous reactions

Product will not undergo hazardous polymerization.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity

Acute oral toxicity - : no data available
Product

Acute inhalation toxicity

Acute inhalation toxicity - : no data available
Product

Acute dermal toxicity

Acute dermal toxicity - : no data available
Product

Acute toxicity (other routes of administration)

Acute toxicity (other : no data available

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routes of administration)

12. ECOLOGICAL INFORMATION

Biodegradability

Biodegradability - Product : no data available

Bioaccumulation

Bioaccumulation - Product : no data available

Ecotoxicity effects

Toxicity to fish

Toxicity to fish - Product : no data available

Toxicity to daphnia and other aquatic invertebrates

Toxicity to daphnia and
other aquatic invertebrates
- Product : no data available

Toxicity to algae

Toxicity to algae -
Product : no data available

Toxicity to bacteria

Toxicity to bacteria -
Product : no data available

13. DISPOSAL CONSIDERATIONS

Waste disposal methods

Dispose of in accordance with all applicable local, state and federal regulations.

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14. TRANSPORT INFORMATION

REGULATION

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.
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U.S. DOT - ROAD

Not dangerous goods

U.S. DOT - RAIL

Not dangerous goods

U.S. DOT - INLAND WATERWAYS

Not dangerous goods

TRANSPORT CANADA - ROAD

Not dangerous goods

TRANSPORT CANADA - RAIL

Not dangerous goods

TRANSPORT CANADA - INLAND WATERWAYS

Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

Not dangerous goods

MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES

Not dangerous goods

*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

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Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

15. REGULATORY INFORMATION**California Prop. 65**

WARNING! This product contains a chemical known to the State of California to cause cancer.

QUARTZ (SiO₂)
SILICA - CRYSTALLINE,
TRIDYMITE

SARA Hazard Classification**SARA 311/312 Classification**

Chronic Health Hazard

SARA 313 Component(s)

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

New Jersey RTK Label Information

WATER	7732-18-5
BENTONITE ROCK CLAY	1302-78-9
CELLULOSE	9004-34-6
QUARTZ (SiO ₂)	14808-60-7
SILICA - CRYSTALLINE, TRIDYMITE	15468-32-3

Pennsylvania RTK Label Information

WATER	7732-18-5
BENTONITE ROCK CLAY	1302-78-9
CELLULOSE	9004-34-6

Notification status

US. Toxic Substances Control Act	y (positive listing)
Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL). (Can. Gaz. Part II, Vol. 133)	y (positive listing)
Australia. Industrial Chemical (Notification and Assessment) Act	y (positive listing)

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New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand	y (positive listing)
Japan. Kashin-Hou Law List	n (Negative listing)
Korea. Toxic Chemical Control Law (TCCL) List	y (positive listing)
Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act	y (positive listing)
China. Inventory of Existing Chemical Substances	y (positive listing)

	HMIS	NFPA
Health	1*	0
Flammability	0	0
Physical hazards	0	
Instability		0
Specific Hazard	--	--

16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).