

SAFETY DATA SHEET

Conforms to OSHA HazCom 2024 Standard

SECTION 1: IDENTIFICATION**1.1 PRODUCT IDENTIFIER**

R90+FG

1.2 CHEMICAL NAME

Silyl-Terminated Polyether

1.3 SYNONYMS

Advanced Polymer Sealant

1.4 RECOMMENDED USE OF CHEMICAL AND RESTRICTIONS ON USE

Industrial Use Adhesive and Sealant

1.5 NAME, ADDRESS, AND TELEPHONE OF MANUFACTURERR2 Sealant Systems
3410 Millennium Blvd SE
Massillon, Ohio 44646
330-880-4700**1.6 EMERGENCY TELEPHONE NUMBER**

CHEMTREC (24/7): 1-800-424-9300

SECTION 2: HAZARD IDENTIFICATION**2.1 CLASSIFICATION OF THE CHEMICAL IN ACCORDANCE WITH PARAGRAPH (d) OF 29 CFR 1910.1200**

Eye Irritation, Category 2A

Skin Sensitization, Category 1

Reproductive Toxicity, Category 1B

Carcinogenicity, Category 1A

2.2 LABEL ELEMENTS**2.2A SIGNAL WORD**

DANGER!

2.2B HAZARD STATEMENT

Causes serious eye irritation. May cause an allergic skin reaction. May cause cancer. May damage fertility or the unborn child.

2.2C HAZARD PICTOGRAMS**2.2D PRECAUTIONARY STATEMENTS**

Wash hands thoroughly after handling. Do not breathe vapors/fumes. Do not eat, drink, or smoke while using this product. Use in a well-ventilated area. Wear impervious gloves/protective clothing/eye protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Contaminated work clothing must not be allowed out of the workplace. IF ON SKIN: wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs, get medical attention. IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical attention. IF INHALED: remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms, call a doctor. IF SWALLOWED: rinse mouth. DO NOT induce vomiting. Get medical

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advice/attention if you feel unwell. Store locked up. Store in a well-ventilated place. Keep container tightly closed. Dispose of contents/containers in accordance with all local, state, provincial, and federal regulations.

2.3 HAZARDS NOT OTHERWISE CLASSIFIED

None known.

2.4 UNKNOWN ACUTE TOXICITY

24.5% of the mixture consists of ingredient(s) of unknown acute toxicity – oral.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS**3.1 SUBSTANCE / MIXTURE**

Chemical Name	CAS Number	% by Weight*
Vinyltrimethoxysilane	2768-02-7	1 – 2
Calcium Carbonate**	1317-65-3	50 – 70
Crystalline Silica, Quartz**	14808-60-7	0.1 – 1
Aminoalkoxysilane	1760-24-3	0.5 – 1.5
Dibutylbis(pentane-2,4-dionato-O,O')tin	22673-19-4	0.1 – 1

*In accordance with paragraph (i) of §1910.1200, the range is due to batch-to-batch variability in the product of the mixture, or for a group of substantially similar mixtures with similar chemical composition.

**Particles are fully encapsulated; therefore, inhalation is highly unlikely.

SECTION 4: FIRST AID MEASURES**4.1 DESCRIPTION OF FIRST AID MEASURES****4.1A INHALATION**

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if you feel unwell.

4.1B SKIN

Immediately wash skin with plenty of soap and water. Avoid spreading material on unaffected skin. If skin irritation or rash occurs, get medical attention. Take off contaminated clothing and wash before reuse.

4.1C EYES

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention immediately.

4.1D INGESTION

DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice.

4.2 MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED

Aside from the information found under description of first aid measures (above) and indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

4.3 INDICATION OF IMMEDIATE MEDIAL ATTENTION AND SPECIAL TREATMENT NEEDED

No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

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SECTION 5: FIREFIGHTING MEASURES

5.1 EXTINGUISHING MEDIA

Carbon dioxide. Foam. Dry chemical. Water spray.

5.2 SPECIFIC HAZARDS ARISING FROM THE CHEMICAL

Harmful vapors/gases may be formed. Toxic fumes such as carbon monoxide, hydrogen sulfide, sulfur oxide, and nitrogen oxide may be released.

5.3 SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS

Wear self-contained breathing apparatus for firefighting.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES

Follow safe handling advice and personal protective equipment recommendations. Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.

6.2 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

Wipe up or scrape up and contain for salvage or disposal. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable. For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container.

SECTION 7: HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

Take care to prevent spills, waste and minimize release to the environment. Handle in accordance with good industrial hygiene and safety practice. Wear recommended personal protection. Use only with adequate ventilation.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Keep in properly labelled containers. Keep out of the reach of children. Keep container tightly closed. Store at room temperature in a well-ventilated place. Keep away from strong oxidizing agents and moisture.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

Chemical Name	Occupational Exposure Guidelines	
	OSHA-PEL	ACGIH-TLV
Methanol*	200 ppm	200 ppm
Calcium Carbonate**	5 mg/m ³	5 mg/m ³
Crystalline Silica, Quartz**	0.05 mg/m ³	0.025 mg/m ³
Dibutylbis(pentane-2,4-dionato-O,O')tin	0.1 mg/m ³	0.1 mg/m ³

*Methanol is not a component of the mixture; however, methanol is a byproduct that is released during curing.

**Particles are fully encapsulated; therefore, inhalation is highly unlikely.

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8.2 APPROPRIATE ENGINEERING CONTROLS

Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

8.3 INDIVIDUAL PROTECTION MEASURES

Use safety glasses and chemical resistant gloves, such as nitrile or neoprene. Wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions, no respiratory protection should be needed; however, if handling at elevated temperatures without sufficient ventilation, use an approved air-purifying respirator with an organic vapor cartridge.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE	Paste
COLOR	Off-White
ODOR	Mint-like
MELTING POINT	No data available
FREEZING POINT	No data available
BOILING POINT	Not applicable
FLAMMABILITY	Not classified as a flammability hazard
LOWER/UPPER EXPLOSION LIMIT	No data available
FLASH POINT	>100°C (>212°F), closed cup
AUTO-IGNITION TEMPERATURE	No data available
DECOMPOSITION TEMPERATURE	No data available
pH	Not applicable
VISCOSITY	3,600,000 cP
SOLUBILITY IN WATER	Not miscible
PARTITION COEFFICIENT n-OCTANOL/WATER	No data available
VAPOR PRESSURE	No data available
DENSITY	14.2 lbs./gal
RELATIVE VAPOR DENSITY	No data available
PARTICLE CHARACTERISTICS	No data available
VOC	<34 g/L, less water and exempt solvents

SECTION 10: STABILITY AND REACTIVITY

10.1 REACTIVITY

Not classified as a reactivity hazard.

10.2 CHEMICAL STABILITY

Stable under normal conditions.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS

No dangerous reactions known under normal conditions of use.

10.4 CONDITIONS TO AVOID

Heat and incompatible materials.

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10.5 INCOMPATIBLE MATERIALS

Avoid contact with strong oxidizing materials and moisture.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

Decomposition products can include and are not limited to carbon oxide, nitrogen oxide, and aldehydes. Methanol is a byproduct that is released when the product reacts with moisture.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON THE LIKELY ROUTES OF EXPOSURE

Eye contact, skin contact, inhalation, and ingestion.

11.2 SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL, AND TOXIOLOGICAL CHARACTERISTICS

Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause skin irritation. Handling can cause dry skin, discomfort, irritation, and dermatitis. May cause an allergic skin reaction. May cause respiratory tract irritation. Prolonged or repeated inhalation of respirable crystalline silica can cause silicosis, a serious disabling and fatal lung disease. May be harmful if swallowed. Ingestion may cause discomfort, nausea, or vomiting.

11.3 DELAYED, IMMEDIATE, AND CHRONIC EFFECTS OF SHORT AND LONG-TERM EXPOSURE

May cause skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. May cause respiratory irritation. May cause cancer. May damage fertility or the unborn child. Not classified as a respiratory sensitizer, aspiration hazard, germ cell mutagen, nor STOT-RE.

11.4 NUMERICAL MEASURES OF TOXICITY

Chemical Name	Test Method	Species	Result
Vinyltrimethoxysilane	LD50, Oral	Rat	>7,000 mg/kg
Calcium Carbonate	LD50, Oral	Rat	6,450 mg/kg
Crystalline Silica, Quartz	LD50, Oral	Rat	>10,000 mg/kg
Aminoalkoxysilane	LD50, Oral	Rat	>7,500 mg/kg
Dibutylbis(pentane-2,4-dionato-O,O')tin	LD50, Oral	Rat	1,864 mg/kg
R90+FG _{Mix} Estimate	LD50, Oral	Estimate	5,898 mg/kg

11.5 INTERACTIVE EFFECTS

None known.

11.6 CARCINOGENICITY

May cause cancer.

SECTION 12: ECOLOGICAL INFORMATION

12.1 ECOTOXICITY

No data available.

12.2 PERSISTENCE AND DEGRADABILITY

No data available.

12.3 BIOACCUMULATIVE POTENTIAL

No data available.

12.4 MOBILITY IN SOIL

No data available.

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12.5 OTHER ADVERSE EFFECTS

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS**13.1 DESCRIPTION OF WASTE RESIDUES**

Do not dump into any sewers, on the ground, or into any body of water.

13.2 INFORMATION ON SAFE HANDLING AND METHODS OF DISPOSAL

All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility of the waste generator. Empty containers should be recycled or otherwise disposed of by an approved waste management facility. Do not re-use containers for any purpose.

SECTION 14: TRANSPORT INFORMATION**14.1 UN NUMBER**

Not regulated.

14.2 UN PROPER SHIPPING NAME

Not regulated.

14.3 TRANSPORT HAZARD CLASS

Not regulated.

14.4 ENVIRONMENTAL HAZARDS

Not regulated.

14.5 TRANSPORT IN BULK

Not regulated.

14.6 SPECIAL PRECAUTIONS

None known.

SECTION 15: REGULATORY INFORMATION**15.1 SAFETY, HEALTH, AND ENVIRONMENTAL REGULATIONS****15.1A EPA SARA TITLE III HAZARD CLASS**

Classified as a Health Hazard.

15.1B OSHA HCS HAZARD CLASS

Eye Irritation, Category 2A. Skin Sensitization, Category 1. Carcinogenicity, Category 1A. Reproductive Toxicity, Category 1B.

15.1C TSCA

All components of this product are listed on TSCA inventory.

15.1D CANADIAN WHIMIS

This product is not a "controlled product".

15.1E CANADIAN DSL

All components of this product are listed on the Domestic Substance List.

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15.1F CALIFORNIA PROPOSITION 65

Warning! This product can expose you to methanol, which is known to the State of California to cause birth defects or other reproductive harm, and crystalline silica, which is known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov.

SECTION 16: OTHER INFORMATION**PREPARATION DATE:** 02/13/2024**REVISION DATE:** 02/24/2026**VERSION:** 2.0

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