

SDS# 972KIT
Date: February 2018

Total Pages: 7

Super Seal™ Sealant Total Medium Systems

SECTION 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

Product Name: Super Seal™ Sealant Total Medium Systems 1.5-5tons
Catalog Number: 972KIT
Product Class: HVAC/R refrigerant additive
Manufactured by: DiversiTech Corporation
6650 Sugarloaf Parkway
Duluth, GA, 30097
Information Phone No.: 1+678.542.3600
EMERGENCY Phone No.: 1 800.255.3924 Chem-Tel (Chemical Emergencies)

SECTION 2. HAZARDOUS INGREDIENTS INFORMATION

GHS Classification:

Flammable liquids: Category 3
Acute toxicity, inhalation: Category 4
Serious eye damage/irritation: Category 1
Skin sensitization: Category 1
Specific Target Organ Toxicity (Repeat Exposure): Category 2
Hazardous to the aquatic environment: Chronic 3

Label Elements:



Signal Word Danger

Hazard Statement(s)

Flammable liquid and vapor
Harmful if inhaled
Causes serious eye damage
May cause an allergic skin reaction
May cause damage to organs through repeated or prolonged exposure (bladder).
Harmful to aquatic life with long lasting effects

Precautionary statement(s)

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Wear protective gloves and eye protection.
Avoid breathing mist, vapor or spray.
Use only outdoors or in a well-ventilated area
Avoid release to the environment.

In case of fire: Use carbon dioxide, dry chemical powder, alcohol-resistant foam or water spray to extinguish.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately seek medical attention.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a doctor if you feel unwell.
Get medical attention if you feel unwell.

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SECTION 2. HAZARDOUS INGREDIENTS INFORMATION (cont.)

Precautionary statements (continued):

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
If skin irritation or rash occurs: Get medical attention.
Specific treatment: see first aid measures on this label.
Contaminated clothing should not be allowed out of the workplace.
Take off contaminated clothing and wash it before reuse.

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

Other hazards

None known.

SECTION 3. HAZARDOUS INGREDIENTS INFORMATION

INGREDIENT	CAS No.	Composition, wt%
Triethylorthoformate	122-51-0	30 - 40
Trimethoxyvinylsilane	2768-02-7	10 - 14
N-(3-(trimethoxysilyl)propyl)		
ethylenediamine	1760-24-3	3 - 7
Trimethoxy(methyl)silane	1185-55-3	1 - 5

Remaining components of this product are not classified as hazardous under WHMIS 2015.

SECTION 4. FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

Remove person to fresh air. Give artificial respiration if not breathing. If breathing is difficult, oxygen may be given by qualified personnel. Obtain medical attention.

Ingestion

Do NOT induce vomiting. Wash out mouth with water provided person is conscious. Call a physician.

Skin Contact

Immediately wash skin with soap and plenty of water. If irritation persists or if contact has been prolonged, obtain medical attention. Take off contaminated clothing and wash it before reuse.

Eye Contact

Remove contact lenses and immediately flush eyes with copious amounts of water for at least 15 minutes. Obtain medical attention.

Acute and Delayed Symptoms

This product is expected to react with moisture in the gastrointestinal tract to form methanol. Symptoms may be delayed and include headache, dizziness, nausea, lack of coordination and confusion.

Special Treatment Needed

Get medical treatment immediately.

SECTION 5. FIREFIGHTING MEASURES

Extinguishing media

DO NOT USE WATER STREAM. Use carbon dioxide, dry chemical powder, alcohol-resistant foam or water spray.

Special hazards arising from the product

Vapors from this product may travel or be moved by air currents and ignited by pilot light or other flames and ignition sources at locations distant from product handling point. Burning can produce oxides of carbon, nitrogen and silicon.

Advice for firefighters

Wear self-contained breathing apparatus and protective clothing. Do not breathe fumes or vapors.

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SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, protective equipment and emergency procedures

Clear the area of unnecessary personnel. Shut off all sources of ignition. No smoking. Wear chemical-resistant gloves and chemical safety goggles. Ensure adequate ventilation. Do not breathe fumes or vapors.

Environmental Precautions

Avoid runoff to sewers and waterways.

Methods and materials for containment and cleaning up

Cover spill with dry-lime, sand, or soda ash. Place in covered containers using non-sparking tools and transport outdoors. Ventilate area and wash spill site after material pickup is complete.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

Do not breathe vapor. Wear chemical-resistant gloves and chemical safety goggles. Avoid contact with eyes, skin, and clothing.

Conditions for safe storage

This product should be stored and handled in closed equipment to keep vapors in and moisture out. When this is done, general room ventilation is expected to be satisfactory. Keep away from sparks, open flame or other sources of ignition.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

COMPONENT	CAS No.	VALUE	CONTROL PARAMETERS
Trimethoxyvinylsilane	2768-02-7	Ontario OEL	10 ppm 60 mg/m ³

Engineering Controls

Have an eyewash available. General room ventilation is expected to be sufficient for use of this product.

Protective Equipment

Wear chemical-resistant gloves and chemical safety goggles or safety glasses with side shields and chemical protective clothing.

Hygiene

Practice good industrial hygiene. Contaminated clothing should not be allowed out of the workplace. Wash contaminated clothing before re-use.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear pale yellow liquid
Odor	Ethereal
Odor threshold	No data available
pH	No data available
Freezing point	No data available
Boiling point	No data available
Flash point	33°C (91°F)
Evaporation rate	No data available
Flammability or explosive limits	No data available
Vapor pressure	No data available
Vapor density	No data available
Specific Gravity	0.95 g/cm ³ @ 25°C (77°F)
Water Solubility	No data available
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available

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SECTION 10. STABILITY AND REACTIVITY

Reactivity

Reacts with water.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Unlikely.

Conditions to avoid

Moisture, heat, flames and sparks.

Incompatible materials

Acids, strong oxidizing agents

Hazardous decomposition products

Reacts with water or moisture to form methanol.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure

Inhalation: May be harmful if inhaled.

Ingestion: Not a likely route of exposure. May be harmful if swallowed.

Skin Contact: May cause an allergic skin reaction.

Eye Contact: Causes serious eye damage.

Symptoms related to physical, chemical and toxicological characteristics

Inhalation: Symptoms of exposure may include coughing, wheezing, shortness of breath and breathing difficulties

Ingestion: Irritation of mucous membranes, in the mouth, pharynx, esophagus and gastrointestinal tract, Risk of aspiration upon vomiting.

Aspiration may cause pulmonary edema and pneumonitis.

Skin Contact: Repeated or prolonged exposure may cause skin irritation and dermatitis.

Eye Contact: Symptoms may include pain, watering or redness. There is a risk of corneal clouding.

Delayed and immediate effects

Serious effects due to inhalation may be delayed.

Chronic effects from short-term and long-term exposure

May cause damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur on subsequent exposures.

Numerical measures of toxicity

The toxicological properties of this product have not been investigated.

Information for hazardous components is provided below.

Acute toxicity

Oral LD50 rat:	Triethylorthoformate: 7060 mg/kg Trimethoxyvinylsilane: >7000 mg/kg N-(3-(trimethoxysilyl)propyl)ethylenediamine: 8000 mg/kg Trimethoxy(methyl)silane: 11,685 mg/kg
Inhalation LC50 rat: 4 h	Trimethoxyvinylsilane: 16.4-17.8 mg/l N-(3-(trimethoxysilyl)propyl)ethylenediamine: 1.49-2.44 mg/l Trimethoxy(methyl)silane: >42.1 mg/l
Skin LD50 rabbit:	Triethylorthoformate - 17820 mg/kg Trimethoxyvinylsilane: 4000 mg/kg N-(3-(trimethoxysilyl)propyl)ethylenediamine: >2000 mg/kg
Skin LD50 guinea pig:	Triethylorthoformate - >8910 mg/kg
Skin LD50 rat:	Trimethoxy(methyl)silane: >9,500 mg/kg

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SECTION 11. TOXICOLOGICAL INFORMATION (cont.)

Skin corrosion/irritation

Rabbit: Triethylorthoformate – slightly irritating
Trimethoxyvinylsilane: no irritation
Trimethoxy(methyl)silane: no irritation

Serious eye damage/irritation

Rabbit: Triethylorthoformate – no irritation
N-(3-(trimethoxysilyl)propyl)ethylenediamine: corrosive to eyes
Trimethoxy(methyl)silane: no eye irritation

Respiratory or skin sensitization

Guinea pig: Trimethoxyvinylsilane - did not cause sensitization
N-(3-(trimethoxysilyl)propyl)ethylenediamine - may cause sensitization by skin contact
Trimethoxy(methyl)silane – did not cause sensitization

Carcinogenicity

None of the components of this product is identified as a carcinogen by IARC, ACGIH, NTP or OSHA.

Specific target organ toxicity – repeat exposure

Trimethoxyvinylsilane: Target organ - bladder

SECTION 12. ECOLOGICAL INFORMATION

No data are available for the ecological effects of this product; information on some components is provided below.

Toxicity to fish:

Triethylorthoformate
LC50 – 48 h
Species: Leuciscus idus
Result: 592 mg/l

Trimethoxyvinylsilane
LC50 – 96 h
Species: Brachydanio
Result: >100 mg/l

Trimethoxyvinylsilane
LC50 – 96 h
Species: Oncorhynchus mykiss
Result: >191 mg/l

N-(3-(trimethoxysilyl)propyl)ethylenediamine
LC50
Species: Lepomis macrochirus
Result: >100 mg/l

Toxicity to other organisms:

Triethylorthoformate
EC50 – 48 h
Species: Daphnia magna
Result: 617 mg/l

Trimethoxyvinylsilane
EC50 – 48 h
Species: Daphnia magna
Result: >100 mg/l

N-(3-(trimethoxysilyl)propyl)ethylenediamine
EC50 – 48 h
Species: Daphnia magna
Result: 87.4 mg/l

Toxicity to algae:

Trimethoxyvinylsilane
EC50 – 72 h

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SECTION 12. ECOLOGICAL INFORMATION (cont.)

Species: *Desmodesmus subspicatus*
Result: >100 mg/l

N-(3-(trimethoxysilyl)propyl)ethylenediamine
EC50 - 96 h
Species: *Pseudokirchneriella subcapitata*
Result: 8.8 mg/l
N-(3-(trimethoxysilyl)propyl)ethylenediamine
NOEC
Species: *Pseudokirchneriella subcapitata*
Result: 3.1 mg/l

Toxicity to microorganisms: Trimethoxyvinylsilane
NOEC
Species: Bacteria
Result: >1000 mg/l
Exposure time: 3 h

Persistence and degradability

Triethylorthoformate: Readily biodegradable.

The silane components of the product degrade through hydrolysis into alcohols and silanol and/or siloxanol compounds. These components are not expected to be readily biodegradable.

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Product

Contact a licensed professional waste disposal service to dispose of this material. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is flammable. Observe all federal, provincial, and local environmental regulations.

Contaminated packaging

Dispose of as product.

SECTION 14. TRANSPORTATION INFORMATION

TDG/IATA/IACO/IMDG

Shipping Name: FLAMMABLE LIQUID, N.O.S. (ethyl orthoformate)

UN #: 1993

Class: 3

Packing Group: III

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SECTION 15. REGULATORY INFORMATION

Superfund Amendments and Reauthorization Act (SARA) Title III Information: SARA Section 311/312 (40 CFR 370)

Immediate Hazard – Yes, Flammable liquids category 3, Serious eye damage/irritation category 2, Hazardous to the aquatic environment (Chronic 3)

Delayed Hazard – Yes, Acute toxicity (inhalation) category 4, Skin sensitization category 1, Specific target organ toxicity (repeat exposure) category 2

Fire Hazard – Yes, Category 3

Pressure Hazard – No

Reactivity Hazard – Low risk for hazardous reactions

SARA Section 313 (40 CFR 372) component

This material does not contain any chemical components with known CAS numbers that exceed the De Minimis reporting levels established by SARA Title III, Section 313 and 40 CFR 372.

State Regulations – California Proposition 65:

This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins under at levels which would be subject to the proposition.

Toxic Substances Control Act (TSCA):

All components of this product are included on the TSCA inventory.

International Regulations

Canadian Environmental Protection Act (DSL)

All products are on the Canadian Domestic Substance List (DSL)

Canadian Workplace Hazardous Materials Information System (WHMIS)

Flammable liquids: Category 3

Acute toxicity, inhalation: Category 4

Serious eye damage/irritation: Category 1

Skin sensitization: Category 1

Specific Target Organ Toxicity (Repeat Exposure): Category 2

Hazardous to the aquatic environment: Chronic 3

SECTION 16. OTHER INFORMATION INCLUDING INFORMATION ON PREPARATION AND REVISION OF THE SDS

Notes to this Revision

This version 3.1 (February 12, 2018) has been updated from the previous version 2.2 of August 1, 2017.

All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency. Conditions of use are beyond our control therefore users are responsible for verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.