

**SDS# 947KIT**  
**Date: February 12, 2018**

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## Super Seal™ Sealant Advanced Small Systems

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

**Product Name:** Super Seal™ Sealant Advanced Small Systems up to 1.5 tons

**Catalog Number:** 947KIT

**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

Skin corrosion/irritation: Category 2

Serious eye damage/irritation: Category 1

Specific Target Organ Toxicity (Repeat Exposure): Category 2

Skin Sensitization: Category 1

Hazardous to the aquatic environment (Chronic 3)

#### Label Elements:



**Signal Word** Danger

#### Hazard Statement(s)

Flammable liquid and vapor

Causes serious eye damage

Causes skin irritation

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.

Do not breathe mist, vapor or spray.

Wash hands and exposed skin thoroughly after handling.

Do not eat, drink or smoke when using this product.

Wear protective gloves and eye protection.

Avoid release to the environment.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

## Super Seal™ Sealant Advanced Small Systems

### SECTION 2. HAZARDOUS INGREDIENTS INFORMATION (cont.)

#### Precautionary statements (continued):

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor.

Specific treatment: see first aid measures on this label.

In case of fire: Use dry chemical to extinguish.

If skin irritation or rash occurs: Get medical attention.

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	60 - 80
Trimethoxyvinylsilane	2768-02-7	1 - 5
N-(3-(trimethoxysilyl)propyl) ethylenediamine	1760-24-3	1 - 5
Trimethoxy(methyl)silane	1185-55-3	0.1 - 1

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.

##### Eye Contact

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

##### Skin Contact

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

##### Ingestion

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

##### 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 substance or mixture

Burning in a fire produces carbon oxides, silicon oxides, smoke and fumes.

#### Advice for firefighters

Self-contained breathing apparatus and protective clothing if required.

Vapors may travel considerable distance to a source of ignition and flash back.

## Super Seal™ Sealant Advanced Small Systems

### SECTION 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions

Shut off all sources of ignition. Wear chemical-resistant gloves and chemical safety goggles or safety glasses with side shields. Provide adequate ventilation.

#### Environmental precautions

Provide adequate ventilation. 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

Avoid breathing vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. See section 8 for protective clothing. Use away from heat, sparks, open flame or any other ignition source. Wash hands thoroughly after handling.

#### Conditions for safe storage

Keep away from heat, sparks, and open flame. In the opened canister, this product is sensitive to moisture.

### SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### Control Parameters

None of the components of this product have occupational exposure limit values.

#### Engineering Controls

General room ventilation is expected to be sufficient for use of the product.

#### Protective Equipment

Use protective gloves. Use eye protection and chemical protective clothing.

#### Hygiene

Wash thoroughly after handling. Wash contaminated clothing before reuse.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Clear colourless liquid
<b>Odor</b>	Ethereal
<b>Odor threshold</b>	No data available
<b>pH</b>	No data available
<b>Freezing point</b>	No data available
<b>Boiling point</b>	No data available
<b>Flash point</b>	30°C (86°F)
<b>Evaporation rate</b>	No data available
<b>Flammability or explosive limits</b>	No data available
<b>Vapor pressure</b>	No data available
<b>Vapor density</b>	No data available
<b>Specific Gravity</b>	0.95 g/cm <sup>3</sup> @ 25°C (77°F)
<b>Water Solubility</b>	No data available
<b>Partition coefficient: n-octanol/water</b>	No data available
<b>Auto-ignition temperature</b>	No data available
<b>Decomposition temperature</b>	No data available
<b>Viscosity</b>	No data available

## Super Seal™ Sealant Advanced Small Systems

### SECTION 10. STABILITY AND REACTIVITY

#### Reactivity

Reacts with water or moisture

#### 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. In a fire, carbon monoxide, carbon dioxide and silicon oxides are formed.

### SECTION 11. TOXICOLOGICAL INFORMATION

The toxicological properties of this product have not been investigated. Information for some components is provided below.

#### Acute toxicity

Oral LD50 rat:

Triethylorthoformate - 7060 mg/kg  
Trimethoxyvinylsilane - 7340 - 7460 mg/kg  
N-(3-(trimethoxysilyl)propyl)ethylenediamine - 2995 mg/kg  
Trimethoxy(methyl)silane - 11685 mg/kg

Skin LD50 rabbit:

Triethylorthoformate - 17820 mg/kg  
Trimethoxyvinylsilane - 3460 - 4000 mg/kg  
N-(3-(trimethoxysilyl)propyl)ethylenediamine - >2000 mg/kg  
Trimethoxy(methyl)silane - >9500 mg/kg

Skin LD50 guinea pig:

Triethylorthoformate - >8910 mg/kg

Inhalation LC50 rat:

Trimethoxyvinylsilane - 16.79 mg/l  
N-(3-(trimethoxysilyl)propyl)ethylenediamine - 1.49 - 2.44 mg/l  
Trimethoxy(methyl)silane - >42.1 mg/l

#### Skin corrosion/irritation

Rabbit:

Triethylorthoformate - slightly irritating  
Trimethoxyvinylsilane - no irritation  
N-(3-(trimethoxysilyl)propyl)ethylenediamine - no irritation  
Trimethoxy(methyl)silane - no irritation

#### Serious eye damage/irritation

Rabbit:

Triethylorthoformate - no irritation  
Trimethoxyvinylsilane - no irritation  
N-(3-(trimethoxysilyl)propyl)ethylenediamine - strongly irritating  
Trimethoxy(methyl)silane - no irritation

#### Respiratory or skin sensitization

Guinea pig:

Trimethoxyvinylsilane - did not elicit a delayed contact hypersensitivity response  
N-(3-(trimethoxysilyl)propyl)ethylenediamine - may cause sensitization by skin contact  
Trimethoxy(methyl)silane - no irritation

#### Repeated Dose Toxicity

Oral rat:

Trimethoxyvinylsilane  
NOAEL: <62.5 mg/kg  
Lowest Observable Effect Level - 62.5 mg/kg

N-(3-(trimethoxysilyl)propyl)ethylenediamine  
NOAEL: >500 mg/kg  
Exposure time: 28 d

Trimethoxy(methyl)silane  
NOAEL: 50 mg/kg  
Exposure time: 28 d

## Super Seal™ Sealant Advanced Small Systems

### SECTION 11. TOXICOLOGICAL INFORMATION (cont.)

Inhalation rat:	Trimethoxyvinylsilane NOAEL - 10 mg/l Lowest Observable Effect Level - 100 mg/kg  Germ cell mutagenicity N-(3-(trimethoxysilyl)propyl)ethylenediamine: negative (Ames test) Carcinogenicity None of the components of this product is identified as a carcinogen by IARC, ACGIH, NTP or OSHA.  Reproductive toxicity N-(3-(trimethoxysilyl)propyl)ethylenediamine No Observed Adverse Effect Level (NOAEL): 500 mg/kg/day (developmental and maternal toxicity)
Oral ratmale:	Trimethoxyvinylsilane NOAEL P1 - 1000 mg/kg NOAEL F1 - 1000 mg/kg
Oral ratfemale:	Trimethoxyvinylsilane NOAEL P1 - 250 mg/kg NOAEL F1 - 1000 mg/kg

**Specific target organ toxicity - single exposure**  
No data available

**Aspiration hazard**  
No data available

#### Potential Health Effects:

**Inhalation:** May be harmful if inhaled. Causes respiratory tract irritation.  
**Skin Contact:** May be harmful if absorbed through skin. Causes mild skin irritation.  
**Eye Contact:** Causes eye irritation.  
**Ingestion:** May be harmful if swallowed.

### SECTION 12. ECOLOGICAL INFORMATION

No data are available for the ecological effects of this product; information on some components is provided below. The silane components of the product degrade through hydrolysis into alcohols and silanol and/or siloxanol compounds. The product is not expected to be readily biodegradable.

<b>Toxicity to fish:</b>	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
<b>Toxicity to other organisms:</b>	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

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### SECTION 12. ECOLOGICAL INFORMATION (cont.)

<b>Toxicity to algae:</b>	Trimethoxyvinylsilane EC50 – 72 h Species: <i>Desmodesmus subspicatus</i> Result: >100 mg/l
	N-(3-(trimethoxysilyl)propyl)ethylenediamine EC50 - 96 h Species: <i>Pseudokirchneriella subcapitata</i> Result: 8.8 mg/l
	N-(3-(trimethoxysilyl)propyl)ethylenediamine NOEC Species: <i>Pseudokirchneriella subcapitata</i> Result: 3.1 mg/l
<b>Toxicity to microorganisms:</b>	Trimethoxyvinylsilane NOEC Species: Bacteria Result: >1000 mg/l Exposure time: 3 h

#### **Persistence and degradability**

No data available

#### **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

### 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, Skin corrosion/irritation/irritation category 2, serious eye damage/irritation category 1, Hazardous to the aquatic environment (Chronic 3)

## Super Seal™ Sealant Advanced Small Systems

### SECTION 15. REGULATORY INFORMATION (cont.)

**Delayed Hazard** – Yes, Specific Target Organ Toxicity (Repeat Exposure) Category 2, Skin Sensitization Category 1

**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

Skin corrosion/irritation/irritation: Category 2

Serious eye damage/irritation: Category 1

Specific Target Organ Toxicity (Repeat Exposure): Category 2

Skin Sensitization: Category 1

Hazardous to the aquatic environment (Chronic 3)

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

*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.*