



VAPCO PRODUCTS, INC.

Safety Data Sheet Xpress Seal Direct Inject

SECTION 1: Identification

1.1 GHS Product identifier

Product name	Xpress Seal Direct Inject
Product number	XPS-SS, XPS-5T, XPS-10T, XPS-15T, XPS-30T, XPS-60T, XPS-125T, XPS-250T
Brand	Vapco

1.3 Recommended use of the chemical and restrictions on use

Refrigerant sealant

1.4 Supplier's details

Name	Vapco Products, Inc.
Address	401 Marshall Road Valley Park, MO 63088 United States
Telephone	(636) 923-2121
Fax	(636) 923-3002
email	info@VapcoProducts.com

1.5 Emergency phone number

(800) 255-3924

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with: OSHA (29 CFR 1910.1200, 2012)

- Aspiration hazard, Cat. 1
- Flammable liquids, Cat. 2
- Skin corrosion/irritation, Cat. 2

2.2 GHS label elements, including precautionary statements

Safety Data Sheet

Pictograms



Signal word Danger

Hazard statement(s)

H225
H304
H315
Highly flammable liquid and vapor
May be fatal if swallowed and enters airways
Causes skin irritation

Precautionary statement(s)

P210
P233
P240
P241
P242
P243
P264
P280
P301+P310
P302+P352
P303+P361+P353
Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Wash hands thoroughly after handling.
Wear protective gloves/eye protection/face protection.
IF SWALLOWED: Immediately call a POISON CENTER/doctor.
IF ON SKIN: Wash with plenty of water.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
Specific treatment (see First Aid on this label).
Do NOT induce vomiting.
If skin irritation occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
In case of fire: Use dry chemical to extinguish.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container to the specifications of local, regional, national, and international regulations.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

1. Silane, ethenyltriethoxy-

Concentration 20 - 75 % (weight)
CAS no. 78-08-0

2. Ethanol

Concentration 2 - 25 % (weight)
EC no. 200-578-6
CAS no. 64-17-5
Index no. 603-002-00-5

Safety Data Sheet

3. Toluene

Concentration < 1 % (weight)
EC no. 203-625-9
CAS no. 108-88-3
Index no. 601-021-00-3

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
If inhaled	First, take proper precautions to ensure your own safety before attempting rescue (e.g. wear appropriate respiratory protective equipment, use the buddy system), then remove the exposed person to fresh air. Keep at rest in a position comfortable for breathing. Get medical advice/attention.
In case of skin contact	Immediately drench affected area with water for at least 15 minutes. Remove contaminated clothing immediately. Obtain medical attention if irritation develops or persists.
In case of eye contact	Immediately rinse with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.
If swallowed	Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2 Most important symptoms/effects, acute and delayed

None known.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Water spray, fog, carbon dioxide (CO₂), alcohol-resistant foam, dry chemical, or sand. Use appropriate media for surrounding fire.

5.2 Specific hazards arising from the chemical

Explosion Hazard: Container may explode in heat of fire. Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. Vapors are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapors.

Reactivity: May explode if heated. Reacts with strong oxidants causing fire and explosion hazard.

5.3 Special protective actions for fire-fighters

Precautionary Fire Measures: Exercise caution when fighting any chemical fire.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory

Safety Data Sheet

protection. Wear NIOSH-approved Self-Contained Breathing Apparatus with a full face piece operated in a positive pressure demand mode with full body protective clothing when fighting fires.

Firefighting Instructions: Use dry chemical, foam, or carbon dioxide (CO₂). Do not breathe fumes from fire or vapors from decomposition. Do NOT fight fire when fire reaches containers. Evacuate area. Fight fire remotely due to the risk of explosion. Shut off all sources of ignition. Use water spray or fog for cooling exposed containers.

Hazardous Combustion Products: Carbon oxide(s).

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

General Measures: Do not get in eyes, on skin, or on clothing. Do not breathe vapors, spray, mist, gas. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel. Stop leak if safe to do so.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedure: Eliminate ignition sources first, then ventilate the area. Evacuate unnecessary personnel, isolate, and ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

6.2 Environmental precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

6.3 Methods and materials for containment and cleaning up

For Containment: Ventilate the area. Contain any spills with dikes or absorbents to prevent further migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Eliminate all ignition sources. Ventilate area. Stop the ignition source of the release, if safe to do so. Consider the use of water spray to disperse vapors. Isolate the area until gas has dispersed. Ventilate and gas test area before entering. Take up liquid spill into absorbent material. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

Waste Disposal: Dispose of in accordance with local, regional, national, and international regulations. Containers may be hazardous when empty. Do not flame cut, braze, or weld. Product should be fully characterized prior to disposal (40 CFR 261).

Reference to other sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions for Safe Handling: Do not handle until all safety precautions have been read and understood. Avoid contact with skin, eyes and clothing. Do not breathe gas, mist, spray, vapors. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not spray on open flame or other ignition source.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

Other Precautions: Keep out of reach of children. Follow label instructions. Vapors may collect in low lying areas.

Safety Data Sheet

7.2 Conditions for safe storage, including any incompatibilities

Technical Measures: Comply with applicable regulations. Proper grounding procedures to avoid static electricity should be followed.

Storage Conditions: Store in a dry, cool place. Keep only in the original container in a cool, well-ventilated place away from ignition sources. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store locked up/in a secure area.

Incompatible Materials: Heat sources and oxidizers.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1. Ethanol (CAS: 64-17-5)

TWA [Ethyl alcohol] (Inhalation): 1000 ppm; 1880 mg/m3; AU (AU/SWA)

PEL [Ethyl alcohol (Ethanol)] (Inhalation): 1000 ppm; US (US/OSHA)

OSHA Annotated Table Z-1, www.osha.gov

PEL [Ethyl alcohol (Ethanol)] (Inhalation): 1900 mg/m3; US (US/OSHA)

OSHA Annotated Table Z-1, www.osha.gov

PEL [Ethyl alcohol (Ethanol)] (Inhalation): 1000 ppm; US (Cal/OSHA)

OSHA Annotated Table Z-1, www.osha.gov

REL [Ethyl alcohol (Ethanol)] (Inhalation): 1000 ppm; US (NIOSH)

OSHA Annotated Table Z-1, www.osha.gov

2. Toluene (CAS: 108-88-3)

TWA (Inhalation): 50 ppm; 191 mg/m3; AU (AU/SWA)

Other advisory: Sk

STEL (Inhalation): 150 ppm; 574 mg/m3; AU (AU/SWA)

Other advisory: Sk

IOELV-LTEL (Inhalation): 192 mg/m3; EU (EU/OSHA)

Skin designation: Yes. List no. 2 under Council Directive 98/24/EC as amended. List last updated on 8/25/2023.

IOELV-LTEL (Inhalation): 50 ppm; EU (EU/OSHA)

Skin designation: Yes. List no. 2 under Council Directive 98/24/EC as amended. List last updated on 8/25/2023.

IOELV-STEL (Inhalation): 384 mg/m3; EU (EU/OSHA)

Skin designation: Yes. List no. 2 under Council Directive 98/24/EC as amended. List last updated on 8/25/2023.

IOELV-STEL (Inhalation): 100 ppm; EU (EU/OSHA)

Skin designation: Yes. List no. 2 under Council Directive 98/24/EC as amended. List last updated on 8/25/2023.

8.2 Appropriate engineering controls

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Use explosion-proof equipment. Proper grounding procedures to avoid static electricity should be followed. Use only outdoors or in well-ventilated area. Ensure all local, regional, national, and international regulations are being observed. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Safety Data Sheet

Eye/face protection

Chemical safety goggles. Insufficient ventilation: wear respiratory protection. Respiratory protection of the dependent type.

Skin protection

Wear protective gloves and clothing.

Body protection

Wear suitable protective clothing. Wear protective gloves. Chemical resistant materials and fabrics. Wear fire/flame resistant/retardant clothing.

Respiratory protection

Use a NIOSH-approved Self-Containing Breathing Apparatus whenever exposure may exceed established Occupational Exposure Limits.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Liquid
Appearance	Liquid
Color	Clear
Odor	Amine odor
Odor threshold	N/D
Melting point/freezing point	N/D
Boiling point or initial boiling point and boiling range	N/D
Flammability	Flammable liquid by OSHA (29 CFR 1900.1200)
Lower and upper explosion limit/flammability limit	N/D
Flash point	N/D
Auto-ignition temperature	N/D
Decomposition temperature	N/D
pH	N/A
Kinematic viscosity	N/D
Solubility	Insoluble in water
Partition coefficient n-octanol/water (log value)	N/D
Vapor pressure	N/D
Evaporation rate	Fast
Density and/or relative density	N/D
Relative vapor density	>1 (Heavier than air)

SECTION 10: Stability and reactivity

10.1 Reactivity

Reacts with oxidants causing fire and explosion hazard.

10.2 Chemical stability

Stable under recommended handling and storage conditions.

10.3 Possibility of hazardous reactions

None known.

Safety Data Sheet

10.4 Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame. Heat. Sparks.

10.5 Incompatible materials

Heat. Strong oxidizers.

10.6 Hazardous decomposition products

Carbon oxide(s).

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Ethyl alcohol

LD50 Oral - Rat - 7,060 mg/kg

LC50 Inhalation - Rat - 20,000 ppm - 10 hrs

Toluene

LD50 Oral - Rat - >5,580 mg/kg

LC50 Inhalation - Rat - 12,500-28,000 mg/m³ - 4 hrs

LD50 Dermal - Rabbit - 12,196 mg/kg

Silane, ethenyltriethoxy-

LD50 Dermal - Rabbit - 9,100 mg/kg

Skin corrosion/irritation

May cause skin irritation.

Serious eye damage/irritation

May cause mild eye irritation.

Respiratory or skin sensitization

No data available.

Germ cell mutagenicity

No data available.

Carcinogenicity

No component of this product presents at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP, as a carcinogen or potential carcinogen by OSHA, or as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

No data available.

Specific target organ toxicity (STOT) - single exposure

Inhalation may cause respiratory irritation.

Specific target organ toxicity (STOT) - repeated exposure

No data available.

Safety Data Sheet

Aspiration hazard

May be harmful if inhaled. Causes respiratory tract irritation.

SECTION 12: Ecological information

Toxicity

Toluene

LC50 - *Oncorhynchus mykiss* (rainbow trout) - 7.63 mg/l - 96 hrs

NOEC - *Pimephales promelas* (fathead minnow) - 5.44 mg/l - 7 days

EC50 - *Daphnia magna* (water flea) - 6 mg/l - 48 hrs

EC50 - *Chorella vulgaris* (Fresh water algae) - 245 mg/l - 24 hrs

EC50 - *Pseudokochneriella subcapitata* (green algae) - 10 mg/l - 24 hrs

Persistence and degradability

No data available.

Bioaccumulative potential

No data available.

Mobility in soil

No data available.

SECTION 13: Disposal considerations

Disposal methods

Product disposal

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 care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

Packaging disposal

Dispose of as unused product.

Other disposal recommendations

Container may remain hazardous when empty. Continue to observe all precautions. Do not puncture or incinerate container. Product should be fully characterized prior to disposal. Dispose of contents/container in accordance with local, regional, national, and international regulations. Do not pierce or burn, even after use.

SECTION 14: Transport information

DOT (US)

UN Number: UN1993

Class: 3

Packing Group: III

Proper Shipping Name: Flammable liquids, n.o.s.

Safety Data Sheet

IMDG

UN Number: UN1993

Class: 3

Packing Group: III

EMS Number: N/A

Proper Shipping Name: Flammable liquids, n.o.s.

IATA

UN Number: UN1993

Class: 3

Packing Group: III

Proper Shipping Name: Flammable liquids, n.o.s.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

California Proposition 65 Chemicals List

WARNING: This product can expose you to chemicals including Toluene, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Massachusetts Right To Know Components (105 CMR 670)

Chemical name: DENATURED ALCOHOL

CAS number: 64-17-5

Chemical name: METHYLBENZENE

CAS number: 108-88-3

New Jersey Right To Know Components

Common name: ETHYL ALCOHOL

CAS number: 64-17-5

Common name: TOLUENE

CAS number: 108-88-3

Pennsylvania Right To Know Components

Chemical name: ETHANOL

CAS number: 64-17-5

Chemical name: BENZENE, METHYL-

CAS number: 108-88-3

US EPA TSCA public inventory

Chemical name: Ethanol

CAS number: 64-17-5

Chemical name: Toluene

CAS number: 108-88-3

Chemical name: Silane, ethenyltriethoxy-

CAS number: 78-08-0

Safety Data Sheet

SECTION 16: Other information

N/A = Not applicable; N/D = Not determined

16.1 Further information/disclaimer

To the best of our knowledge, information contained herein is accurate. However there is no assumption of liability for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazard which exists. The information contained in this SDS was obtained from current and reliable sources; however, the data is provided without warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions of handling, storage and disposal of this product are beyond the control of the manufacturer, the manufacturer will not be responsible for loss, injury, or expense arising out of the products improper use. No warranty, expressed or inferred, regarding the product described in this SDS shall be created or inferred by any statement in this SDS. Various government agencies may have specific regulations regarding the transportation, handling, storage, use, or disposal of this product which may not be covered by this SDS. The user is responsible for full compliance.

16.2 Preparation information

Prepared by: Jessica Wilson
Date prepared: 2-21-2025