

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Trade name : Thermosil 3002 Part B

1.2. Recommended use and restrictions on use

Recommended use : Adhesives, sealants, Potting material

1.3. Supplier

FMI Chemical, Inc.
4 Northwood Drive
Bloomfield, CT 06002
United States
T 860-243-3222

1.4. Emergency telephone number

Emergency number : For Hazardous Materials or Dangerous Goods Incident Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC Day or Night: 1-800-424-9300 (Toll Free, USA) / 703-527-3887 (Virginia, USA)
CCN 201349
Back-up Emergency Number: 703-741-5970 (D.C, USA)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquids Category 4
Reproductive toxicity Category 1B
Full text of H statements : see section 16

Combustible liquid
May damage fertility or the unborn child

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger

Hazard statements (GHS US) : Combustible liquid
May damage fertility or the unborn child

Precautionary statements (GHS US) : Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Wear protective gloves, eye protection.
If exposed or concerned: Get medical advice/attention.
In case of fire: Use Dry chemical, CO₂, or water spray or regular foam to extinguish.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Thermosil 3002 Part B

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Vinyltriethoxysilane	CAS-No.: 78-08-0	5 - 10	Flam. Liq. 3, H226
1,3,5,7-Tetravinyl-1,3,5,7-Tetramethylcyclotetrasiloxane	CAS-No.: 2554-06-5	0.1 – 1	Repr. 1B, H360 Aquatic Chronic 1, H410

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
First-aid measures after eye contact	: Rinse eyes with water as a precaution. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center/doctor/physician if you feel unwell. Do NOT induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation	: Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/effects after skin contact	: Not expected to present a significant skin hazard under anticipated conditions of normal use.
Symptoms/effects after eye contact	: Not expected to present a significant eye contact hazard under anticipated conditions of normal use.
Symptoms/effects after ingestion	: Not expected to present a significant ingestion hazard under anticipated conditions of normal use.
Chronic symptoms	: May damage fertility or the unborn child.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Dry chemical, CO ₂ , or water spray or regular foam.
Unsuitable extinguishing media	: Do not use a heavy water stream.

Thermosil 3002 Part B

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

5.2. Specific hazards arising from the chemical

Fire hazard : Combustible liquid.
Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon dioxide. Carbon monoxide. Formaldehyde. Hydrogen. Silicon oxides.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion. Do not enter fire area without proper protective equipment, including respiratory protection. Move containers from fire area if it can be done without personal risk. Prevent fire-fighting water from entering environment.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Do not take actions involving personal risks. Evacuate area. Avoid all personal contact including breathing in the mist, spray, vapors. Wear self-contained breathing apparatus. Absorb spillage to prevent material-damage. Stop leak if safe to do so. Notify authorities if product enters sewers or public waters.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Evacuate the danger area. Prevent other non-emergency personnel from entering the danger area. If outdoors, move to an area upwind of the danger area. Avoid contact with skin, eyes and clothing. If possible without taking personal risks, remove ignition sources, ventilate area. No open flames, no sparks, and no smoking.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Evacuate unnecessary personnel. Remove all sources of ignition. Stop leak if safe to do so. Prevent runoff from entering drains, sewers or waterways.

6.2. Environmental precautions

Do not let the product reach soil, drains, sewers, or surface and ground water. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Stop leak, if possible without risk. Contain with non-combustible inert absorbent. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods for cleaning up : Take up in non-combustible inert absorbent and place into container for disposal. Decontaminate surfaces and equipment with water and detergent. Contaminated absorbent material may pose the same hazard as the spilt product. Until a sufficient level of dilution is achieved, the decontamination water may pose the same hazards as the product. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

Thermosil 3002 Part B

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	: Proper grounding procedures to avoid static electricity should be followed.
Precautions for safe handling	: Take precautionary measures against static discharge. Use only outdoors or in a well-ventilated area. Wear personal protective equipment. Avoid breathing mist, spray, vapors. Avoid contact with skin, eyes and clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Use explosion-proof equipment.
Hygiene measures	: Always wash hands after handling the product. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Protect from sunlight. Store in a cool, dry and well-ventilated area away from incompatible substances. Keep container tightly closed. Use explosion-proof equipment.
Incompatible materials	: Strong acids. Strong oxidizers. Strong alkalis.
Heat-ignition	: Keep away from sources of ignition - No smoking.
Packaging materials	: Store always product in container of same material as original container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Thermosil 3002 Part B

No additional information available

Vinyltriethoxysilane (78-08-0)

No additional information available

1,3,5,7-Tetravinyl-1,3,5,7-Tetramethylcyclotetrasiloxane (2554-06-5)

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls	: Ensure good ventilation of the work station. Handle in accordance with good industrial hygiene and safety procedures.
Environmental exposure controls	: Avoid release to the environment. Take measures to reduce or limit air emissions and releases to soil and the aquatic environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Personal protective equipment should be chosen according to national standards and in discussion with the supplier of the protective equipment. Wear recommended personal protective equipment.

Hand protection:

Wear protective gloves

Eye protection:

Wear safety glasses which protect from splashes

Thermosil 3002 Part B

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid.
Appearance	: Liquid.
Color	: Clear Colorless
Odor	: Mild odor
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 76 °C (168.8 °F)
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Combustible liquid.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: 0.98
Solubility	: Insoluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Combustible liquid.

10.2. Chemical stability

Stable under normal conditions of use.

Thermosil 3002 Part B

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

10.3. Possibility of hazardous reactions

Contact with metals could evolve flammable hydrogen gas.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition. Incompatible materials.

10.5. Incompatible materials

Strong acids. Strong oxidizers. Strong bases.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition generates: Carbon dioxide. Carbon monoxide. Formaldehyde. Hydrogen. Silicon oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Vinyltriethoxysilane

LD50 oral rat	> 5000 mg/kg body weight
LD50 dermal rat	> 2000 mg/kg body weight

1,3,5,7-Tetravinyl-1,3,5,7-Tetramethylcyclotetrasiloxane

LD50 oral rat	> 4800 mg/kg body weight
LD50 dermal rabbit	> 2000 mg/kg body weight
LC50 Inhalation - Rat	> 1.32 mg/l air

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitization : Not classified

Vinyltriethoxysilane

Guinea pig maximization test	Not sensitive
------------------------------	---------------

Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : May damage fertility or the unborn child.
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified

Vinyltriethoxysilane

NOAEL (oral,rat,90 days)	62.5 mg/kg body weight
--------------------------	------------------------

Aspiration hazard : Not classified
Viscosity, kinematic : No data available

Vinyltriethoxysilane

Viscosity, kinematic	0.9 mm ² /s
----------------------	------------------------

Thermosil 3002 Part B

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

1,3,5,7-Tetravinyl-1,3,5,7-Tetramethylcyclotetrasiloxane

Viscosity, kinematic	6.3 mm ² /s Temp.: '20°C' Parameter: 'kinematic viscosity (in mm ² /s)'
Symptoms/effects after inhalation	: Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/effects after skin contact	: Not expected to present a significant skin hazard under anticipated conditions of normal use.
Symptoms/effects after eye contact	: Not expected to present a significant eye contact hazard under anticipated conditions of normal use.
Symptoms/effects after ingestion	: Not expected to present a significant ingestion hazard under anticipated conditions of normal use.
Chronic symptoms	: May damage fertility or the unborn child.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.

Vinyltriethoxysilane

LC50 - Fish [1]	> 92.2 mg/l
EC50 - Crustacea [1]	168.7 mg/l
EC50 72h - Algae [1]	> 89 mg/l
LOEC (chronic)	52.4 mg/l
NOEC (chronic)	28.1 mg/l

1,3,5,7-Tetravinyl-1,3,5,7-Tetramethylcyclotetrasiloxane

LC50 - Fish [1]	> 7.3 mg/l
NOEC chronic fish	≥ 0.036 mg/l

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations. Dispose of this material and its container at hazardous or special waste collection point. Refer to all applicable national, international and local regulations or provisions.
Additional information	: Do not re-use empty containers.

Thermosil 3002 Part B

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Ecological waste information : Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

DOT	IMDG	IATA
14.1. UN number		
Not applicable	Not regulated	Not regulated
14.2. Proper Shipping Name		
Combustible liquid, n.o.s. (Vinyltriethoxysilane)	Not regulated	Not regulated
14.3. Transport hazard class(es)		
Combustible liquid	Not regulated	Not regulated
Not applicable	Not applicable	Not applicable
14.4. Packing group		
III	Not regulated	Not regulated
14.5. Environmental hazards		
Dangerous for the environment: No	Not regulated	Not regulated
DOT Note: Material is not hazardous when shipped less than 119 gallons.		

14.6. Special precautions for user

DOT
UN-No.(DOT) : NA1993
DOT Packaging Exceptions (49 CFR 173.xxx) : 150
DOT Packaging Non Bulk (49 CFR 173.xxx) : 203
DOT Packaging Bulk (49 CFR 173.xxx) : 241
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 220 L
DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

IMDG
Not regulated

IATA
Not regulated

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

Thermosil 3002 Part B

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

CANADA

Vinyltriethoxysilane (78-08-0)

Listed on the Canadian DSL (Domestic Substances List)

1,3,5,7-Tetravinyl-1,3,5,7-Tetramethylcyclotetrasiloxane (2554-06-5)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Full text of hazard classes and H-statements

H226	Flammable liquid and vapor
H227	Combustible liquid
H360	May damage fertility or the unborn child
H410	Very toxic to aquatic life with long lasting effects

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.