spectrum®



SAFETY DATA SHEET

Preparation Date: 11/8/2016

Revision Date: Not Applicable

Revision Number: Not Applicable

1. IDENTIFICATION

Product identifier

Product code: Product Name: T2882 1,1,2-Triethoxyethane, 95+%

Other means of identification Synonyms: CAS #: RTECS # CI#:

No information available 4819-77-6 Not available Not available

Recommended use of the chem	ical and restrictions on use
Recommended use:	For manufacturing or laboratory use only.
Uses advised against	No information available
Supplier:	Spectrum Chemical Mfg. Corp 14422 South San Pedro St. Gardena, CA 90248 (310) 516-8000.
Order Online At:	https://www.spectrumchemical.com
Emergency telephone number	Chemtrec 1-800-424-9300
Contact Person:	Martin LaBenz (West Coast)
Contact Person:	Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Label elements

Not classified

Hazards not otherwise classified (HNOC) Not Applicable

Other hazards Not available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
1,1,2-Triethoxyethane, 95+%	4819-77-6	100

	4. FIRST	AID MEASURES		
First aid measures				
General Advice:	National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.			
Skin Contact:		Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention if irritation develops. Consult a physician if necessary.		
Eye Contact:	Flush eyes with water persist, call a physicia	for 15 minutes. Get medical attention if irritation occurs. If symptoms n.		
Inhalation:	Move to fresh air. If no oxygen. Get medical a	ot breathing, give artificial respiration. If breathing is difficult, give attention.		
Ingestion:		Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.		
Most important symptoms and effects, both acute and delayed				
Symptoms	Health injuries are not	known or expected under normal use.		
Indication of any immediate medical attention and special treatment needed				
Notes to Physician:	Treat symptomatically.			
Protection of first-aiders First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.				
	5. FIRE-FIGH	HTING MEASURES		
Extinguishing Media Suitable Extinguishing Media:		Dry chemical. Carbon dioxide (CO2). Water spray, mist, or foam.		
Unsuitable Extinguishing Med	lia:	No information available.		
Specific hazards arising from the chemical				
Hazardous Combustion Produ	icts:	Carbon Oxides.		
Specific hazards:		May be combustible at high temperatures		
Special Protective Actions	for Firefighters			
Specific Methods:		No information available.		
Special Protective Equipment	for Firefighters:	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear		

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Methods for cleaning up	Absorb spill with inert material (e.g. vermiculite, dry sand or earth), then place in a suitable chemical waste container. Clean contaminated surface thoroughly.
Methods for containment	Stop leak if you can do it without risk. Absorb spill with inert material (e.g. vermiculite, dry sand or earth).
Methods and material for cont	ainment and cleaning up
Environmental precautions	Prevent further leakage or spillage if safe to do so.
Personal Precautions:	Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Remove all sources of ignition.

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. All equipment used when handling the product must be grounded. Remove all sources of ignition. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not breathe vapors or spray mist. Do not ingest. Do not smoke. Keep away from open flames, hot surfaces and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

Incompatible Materials:

Strong oxidizing agents Strong acids

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WHEEL
1,1,2-Triethoxyethane, 95+%	4819-77-6	None	None	None	None

Canada

Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
1,1,2-Triethoxyethane, 95+%	4819-77-6	None	None	None	None

Australia and Mexico

Components	CAS-No.	Australia	Mexico
1,1,2-Triethoxyethane, 95+%	4819-77-6	None	None

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection:	Goggles
Skin and body protection:	Chemical resistant apron. Long sleeved clothing. Gloves.
Respiratory protection:	Respiratory protection is not necessary for normal handling. Good room ventilation or use of local exhaust (fume hood) is sufficient. Use a vapor respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapor, inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.
Hygiene measures:	Avoid contact with skin, eyes and clothing. When using, do not eat, drink or

smoke. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid

Odor: No information available.

Molecular/Formula weight: 162.23

Flash Point Tested according to: Not available

Upper Explosion Limit (%): No information available

Boiling point/range(°C/°F): 165°C (329°F)

Specific gravity: No information available

Evaporation rate: No information available

Odor threshold (ppm): No information available

Product code: T2882

Appearance: Clear.

Taste No information available.

Flammability: No information available

Autoignition Temperature (°C/°F): No information available

Melting point/range(°C/°F): No information available

Bulk density: No information available

pH: No information available

Vapor density: No information available

Partition coefficient (n-octanol/water): No information available Color: Colorless.

Formula: C8H18O3

Flashpoint (°C/°F): No information available.

Lower Explosion Limit (%): No information available

Decomposition temperature(°C/°F): No information available

Density (g/cm3): 0.896

Vapor pressure @ 20°C (kPa): No information available

VOC content (g/L): No information available

Viscosity: No information available

Product name: 1,1,2-Triethoxyethane, 95+%

Miscibility:

No information available

Solubility: No information available

10. STABILITY AND REACTIVITY

Reactivity

Reactive with strong oxidizing agents

Chemical stability	
Stability:	Stable under recommended storage conditions.
Possibility of Hazardous Reactions:	- Hazardous polymerization does not occur
Conditions to avoid:	Heat. Ignition sources. Incompatible materials.
Incompatible Materials:	Strong oxidizing agents Strong acids
Hazardous decomposition products:	Carbon oxides.
Other Information	

No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure: Eyes. Ingestion. Inhalation.

Acute Toxicity

Corrosivity:

Component Information

1,1,2-Triethoxyethane, 95+%			
CAS-No.	4819-77-6		
LD50/oral/rat = No information	n available		
LD50/oral/mouse = No information	ation available		
LD50/dermal/rabbit = No infor	rmation available		
LD50/dermal/rat = No information	LD50/dermal/rat = No information available		
LC50/inhalation/rat = No information available			
LC50/inhalation/mouse = No infomation available			
Other LD50 or LC50information = No information available			
Product Information			

LD50/oral/rat = VALUE- Acute Tox Oral = No information available

LD50/oral/mouse = Value - Acute Tox Oral = No information available

Product code: T2882

Product name: 1,1,2-Triethoxyethane, 95+%

LD50/dermal/rabbit VALUE-Acute Tox Dermal = No information available

LD50/dermal/rat VALUE -Acute Tox Dermal = No information available

LC50/inhalation/rat

VALUE-Vapor = No information available VALUE-Gas = No information available VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse

VALUE-Vapor = No information available VALUE - Gas = No information available VALUE - Dust/Mist = No information available

Symptoms

Skin Contact:	May cause skin irritation.
Eye Contact:	May cause eye irritation.
Inhalation	May cause respiratory tract irritation.
Ingestion	Health injuries are not known or expected under normal use.
Aspiration hazard	No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity	No information available.
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Sensitization: No information available.

Carcinogenic effects:

Not considered carcinogenic.

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
1,1,2-Triethoxyethane, 95+%	4819-77-6	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity	No data is available		
Reproductive Effects:	No information available		
Developmental Effects:	No information available		
Teratogenic Effects:	No information available		

Specific Target Organ Toxicity

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects:	No data available.
Persistence and degradability:	No information available
Bioaccumulative potential:	No information available.
Mobility:	No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal Do not re-use empty containers Dispose of as unused product.

Components	CAS-No.	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
1,1,2-Triethoxyethane, 95+%	4819-77-6	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class:	No information available
Subsidiary Class	No information available
Packing group:	No information available
Emergency Response Guide	No information available
Number	
Marine Pollutant	No data available
DOT RQ (lbs):	No information available
Special Provisions	No Information available
Symbol(s):	No information available
Description:	No information available
TDG (Canada)	
UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class:	No information available
Subsidiary Risk:	No information available
Packing Group:	No information available
Marine Pollutant	No Information available
Description:	No information available

Product code: T2882

ADR UN-No: Proper Shipping Name: Hazard Class: Packing Group: Subsidiary Risk:	Not Regulated No information available No information available No information available No information available
IMO / IMDG UN-No: Proper Shipping Name: Hazard Class: Subsidiary Risk: Packing Group: Marine Pollutant	Not Regulated No information available No information available No information available No information available No information available
RID UN-No: Proper Shipping Name: Hazard Class: Subsidiary Risk: Packing Group:	Not Regulated No information available No information available No information available No information available
ICAO UN-No: Proper Shipping Name: Hazard Class: Subsidiary Risk: Packing Group:	Not Regulated No information available No information available No information available No information available
IATA UN-No: Proper Shipping Name: Hazard Class: Subsidiary Risk: Packing Group: ERG Code: Special Provisions	Not Regulated No information available No information available No information available No information available No information available No information available

15. REGULATORY INFORMATION

International Inventories

Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
1,1,2-Triethoxyethane, 95+%	4819-77-6	Not Listed	Not present	Not present	Not present	Not present	Present	Present 225-394-3

U.S. Regulations

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

<u>Chemicals Known to the State of California to Cause Cancer:</u> This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

<u>Chemicals Known to the State of California to Cause Reproductive Toxicity:</u> This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Product name: 1,1,2-Triethoxyethane, 95+%

Components	CAS-No.	Carcinogen	Developmental Toxicity		Female Reproductive
				Toxicity	Toxicity:
1,1,2-Triethoxyethane, 95+%	4819-77-6	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CAS-No.	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
1,1,2-Triethoxyetha ne, 95+%	4819-77-6	None	None	None	None	None

U.S. TSCA

Components	CAS-No.	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	
1,1,2-Triethoxyethane, 95+%	4819-77-6	Not Applicable	Not Applicable

Canada

WHMIS hazard class:

Non-controlled

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Inventory

Components	CAS-No.	Canada (DSL)	Canada (NDSL)
1,1,2-Triethoxyethane, 95+%	4819-77-6	Not Listed	Not Listed

Components	CAS-No.	CEPA Schedule I - Toxic Substances
1,1,2-Triethoxyethane, 95+%	4819-77-6	Not listed
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject
		to Mandatory Reporting
1,1,2-Triethoxyethane, 95+%	4819-77-6	Not listed

EU Classification

R-phrase(s)

not determined (not applicable)

S -phrase(s)

none

Components	CAS-No.	 Concentration Limits:	Safety Phrases
1,1,2-Triethoxyethane, 95+%	4819-77-6	No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger: None.

16. OTHER INFORMATION

Preparation Date:	11/8/2016
Revision Date:	Not Applicable
Prepared by:	Roumann Pangilinan
Disclaimer:	All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet