

SECTION 1: Identification

1.1. Identification

Product form : Mixtures
Product name : FL 500 – FoamLok Polyol

1.2. Recommended use and restrictions on use

Use of the substance/mixture : A component for the production of spray insulation foam

1.3. Supplier

Huntsman Building Solutions
3315 E. Division Street,
Arlington, TX 76011
Tel: 817-640-4900 , 888-224-1533
sdsinfo@huntsmanbuilds.com

1.4. Emergency telephone number

Emergency number : CHEMTREC (24 hours) 800-424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Acute toxicity (oral), Category 4	H302	Harmful if swallowed
Skin corrosion/irritation, Category 1B	H314	Causes severe skin burns and eye damage
Serious eye damage/eye irritation, Category 1	H318	Causes serious eye damage

Full text of H statements: see section 16

2.2. GHS Label elements, including precautionary statements

GHS-US labelling

Hazard pictograms (GHS-US) :



GHS05

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H302 - Harmful if swallowed
H314 - Causes severe skin burns and eye damage
H318 - Causes serious eye damage

Precautionary statements (GHS-US) : P260 - Do not breathe fume, mist, spray, vapors
P264 - Wash hands thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P280 - Wear respiratory protection, protective clothing, protective gloves, eye protection
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a doctor, a POISON CENTER
P330 - Rinse mouth
P363 - Wash contaminated clothing before reuse
P405 - Store locked up
P501 - Dispose of contents/container to comply with applicable local, national and international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
2-Propanol, 1-chloro-, phosphate (3:1)	(CAS-No.) 13674-84-5	10 - 25	Acute Tox. 4 (Oral), H302
Poly(oxy-1,2-ethanediyl), .alpha.-(4-nonylphenyl)-.omega.-hydroxy-, branched	(CAS-No.) 127087-87-0	10 - 25	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 Eye Dam. 1, H318
1-Propanol, 2,2-dimethyl-, tribromo derivative	(CAS-No.) 36483-57-5	1 - 15	Eye Irrit. 2A, H319
Ethanol, 2-[[2-(dimethylamino)ethyl]methylamino]-	(CAS-No.) 2212-32-0	1 - 10	Skin Irrit. 2, H315 Eye Dam. 1, H318
1,3-Propanediamine, N'-[3-(dimethylamino)propyl]-N,N-dimethyl-	(CAS-No.) 6711-48-4	1 - 10	Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Inhalation:vapor), H331 Skin Corr. 1B, H314 Eye Dam. 1, H318

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 victim to fresh air and keep at rest in a position comfortable for breathing. In case of breathing difficulties administer oxygen. In case of irregular breathing or respiratory arrest provide artificial respiration. Get medical advice/attention if you feel unwell.
First-aid measures after skin contact	: Remove contaminated clothing immediately. Wash skin thoroughly with mild soap and water. Seek medical attention immediately.
First-aid measures after eye contact	: Rinse immediately with plenty of water for 15 minutes. Contact lenses should be removed. Immediately get medical attention.
First-aid measures after ingestion	: Rinse mouth immediately and drink plenty of water. Induce vomiting. Never give anything by mouth to an unconscious person. If unconscious, place in the recovery position and seek medical advice. Get medical advice/attention if you feel unwell.

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

Symptoms/effects after inhalation	: May be harmful if inhaled. Prolonged exposure to liquid may cause a mild irritation.
Symptoms/effects after skin contact	: Causes severe skin burns.
Symptoms/effects after eye contact	: Causes serious eye damage.
Symptoms/effects after ingestion	: Harmful if swallowed. May cause stomach pain or discomfort and gastrointestinal disturbance.

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	: Water. Dry extinguishing powder. Carbon dioxide. Foam.
Unsuitable extinguishing media	: None known.

5.2. Specific hazards arising from the chemical

Fire hazard	: Minimal fire hazard. Combustion may produce irritating fumes and carbon oxides.
Explosion hazard	: None known.
Reactivity	: Stable under normal conditions of use.

5.3. Special protective equipment and precautions for fire-fighters

Protective equipment for firefighters	: Wear a self contained breathing apparatus.
Other information	: Prevent entry to sewers and public waters.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment	: Wear suitable protective clothing. Refer to chapter 8.
----------------------	--

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into inert absorbent material. Sweep or shovel spills into appropriate container for disposal.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of residues refer to section 13: Disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid mixing with air or use for any purpose above atmospheric pressure. If possible use nitrogen (under pressure) to carry out transfers. No special fire protection measures are necessary.

Hygiene measures : Wash contaminated clothing prior to re-use. Always wash hands and face immediately after handling this product, and once again before leaving the workplace. Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep out of direct sunlight. Store in original container. Keep container tightly closed in a cool, well-ventilated place. Keep away from heat. Do not freeze. Receptacle under pressure.

Incompatible materials : Strong oxidizing agents. Strong acid. Strong bases.

Storage temperature : 21 - 26 °C

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Poly(oxy-1,2-ethanediyl), .alpha.-(4-nonylphenyl)-.omega.-hydroxy-, branched (127087-87-0)
Not applicable
Ethanol, 2-[[2-(dimethylamino)ethyl]methylamino]- (2212-32-0)
Not applicable
2-Propanol, 1-chloro-, phosphate (3:1) (13674-84-5)
Not applicable
1,3-Propanediamine, N'-[3-(dimethylamino)propyl]-N,N-dimethyl- (6711-48-4)
Not applicable
1-Propanol, 2,2-dimethyl-, tribromo derivative (36483-57-5)
Not applicable

8.2. Appropriate engineering controls

Appropriate engineering controls : Provide adequate ventilation. Provide local exhaust or general room ventilation. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Impervious gloves e.g. PVC, nitrile rubber, butyl rubber

Eye protection:

Chemical goggles or safety glasses

Skin and body protection:

Long sleeved protective clothing. Chemical resistant apron

Respiratory protection:

NIOSH/MSHA approved air purifying respirator should be used if operating conditions produce airborne concentrations that exceed exposure limits for any individual components. If conditions immediately dangerous to life or health exist, use NIOSH/MSHA self contained breathing apparatus (SCBA).

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: Brown
Odor	: Amine-like
Odor threshold	: No data available
pH	: > 7
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 200 °C (closed cup)
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: 1.15 - 1.18 g/cm ³ at 20°C
Solubility	: Water: Slightly soluble
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 800 - 1000 mPa.s @ 23 °C
Explosive 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

Stable under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Temperatures > 26 °C. Protect from moisture. Direct sunlight. Excessive heat.

10.5. Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

10.6. Hazardous decomposition products

Combustion may produce irritating fumes and carbon oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure	: Ingestion; Inhalation; Skin and eyes contact
Acute toxicity	: Oral: Harmful if swallowed.

FL 500 – FoamLok Polyol

ATE US (oral)	1920.240 mg/kg bodyweight
---------------	---------------------------

Skin corrosion/irritation	: Causes severe skin burns and eye damage. pH: > 7
---------------------------	---

Serious eye damage/irritation	: Causes serious eye damage. pH: > 7
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Symptoms/effects after inhalation	: May be harmful if inhaled. Prolonged exposure to liquid may cause a mild irritation.
Symptoms/effects after skin contact	: Causes severe skin burns.
Symptoms/effects after eye contact	: Causes serious eye damage.
Symptoms/effects after ingestion	: Harmful if swallowed. May cause stomach pain or discomfort. Can occur: Gastrointestinal disturbance.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
-------------------	--

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

Effect on global warming	: No known effects from this product.
GWPmix comment	: No known effects from this product.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods	: Dispose of this material and its container to hazardous or special waste collection point.
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated

Transportation of Dangerous Goods

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

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

Poly(oxy-1,2-ethanediyl), .alpha.-(4-nonylphenyl)-.omega.-hydroxy-, branched (127087-87-0)
Listed on the Canadian DSL (Domestic Substances List)
Ethanol, 2-[[2-(dimethylamino)ethyl]methylamino]- (2212-32-0)
Listed on the Canadian DSL (Domestic Substances List)
2-Propanol, 1-chloro-, phosphate (3:1) (13674-84-5)
Listed on the Canadian DSL (Domestic Substances List)
1,3-Propanediamine, N'-[3-(dimethylamino)propyl]-N,N-dimethyl- (6711-48-4)
Listed on the Canadian DSL (Domestic Substances List)
1-Propanol, 2,2-dimethyl-, tribromo derivative (36483-57-5)
Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

Poly(oxy-1,2-ethanediyl), .alpha.-(4-nonylphenyl)-.omega.-hydroxy-, branched (127087-87-0)
Listed on the EU NLP (No Longer Polymers) inventory
Ethanol, 2-[[2-(dimethylamino)ethyl]methylamino]- (2212-32-0)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
2-Propanol, 1-chloro-, phosphate (3:1) (13674-84-5)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
1,3-Propanediamine, N'-[3-(dimethylamino)propyl]-N,N-dimethyl- (6711-48-4)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
1-Propanol, 2,2-dimethyl-, tribromo derivative (36483-57-5)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

Poly(oxy-1,2-ethanediyl), .alpha.-(4-nonylphenyl)-.omega.-hydroxy-, branched (127087-87-0)
Listed on the AICS (Australian Inventory of Chemical Substances) Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China) Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory Listed on the Korean ECL (Existing Chemicals List) Listed on NZIoC (New Zealand Inventory of Chemicals) Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances) Japanese Pollutant Release and Transfer Register Law (PRTR Law) Listed on Turkish inventory of chemical Listed on the TCSI (Taiwan Chemical Substance Inventory)
Ethanol, 2-[[2-(dimethylamino)ethyl]methylamino]- (2212-32-0)
Listed on the AICS (Australian Inventory of Chemical Substances) Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China) Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory Listed on the Korean ECL (Existing Chemicals List) Listed on NZIoC (New Zealand Inventory of Chemicals) Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances) Listed on the TCSI (Taiwan Chemical Substance Inventory)
2-Propanol, 1-chloro-, phosphate (3:1) (13674-84-5)
Listed on the AICS (Australian Inventory of Chemical Substances) Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China) Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory Listed on the Korean ECL (Existing Chemicals List) Listed on NZIoC (New Zealand Inventory of Chemicals) Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances) Listed on INSQ (Mexican National Inventory of Chemical Substances) Listed on Turkish inventory of chemical Listed on the TCSI (Taiwan Chemical Substance Inventory)

1,3-Propanediamine, N'-[3-(dimethylamino)propyl]-N,N-dimethyl- (6711-48-4)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on Turkish inventory of chemical
Listed on the TCSI (Taiwan Chemical Substance Inventory)

1-Propanol, 2,2-dimethyl-, tribromo derivative (36483-57-5)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on Turkish inventory of chemical
Listed on the TCSI (Taiwan Chemical Substance Inventory)

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

Date of Issue : 7 March 2017
Other information : The attention of the user is drawn to the risks possibly incurred by using the product for any other purpose than that for which it was intended.

Full text of H-statements:

H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H331	Toxic if inhaled
H332	Harmful if inhaled

Abbreviations and acronyms:

PVC	Polyvinyl chloride)
-----	---------------------

SDS US (GHS HazCom 2012)

WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE, IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY HUNTSMAN BUILDING SOLUTIONS. HEREUNDER ARE GIVEN GRATIS AND HUNTSMAN BUILDING SOLUTIONS ASSUMES NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK. HUNTSMAN BUILDING SOLUTIONS WILL NOT MAKE ITS PRODUCTS AVAILABLE TO CUSTOMERS FOR USE IN THE MANUFACTURE OF MEDICAL DEVICES WHICH ARE INTENDED FOR PERMANENT IMPLANTATION IN THE HUMAN BODY OR IN PERMANENT CONTACT WITH INTERNAL BODILY TISSUES OR FLUIDS.