

**SAFETY DATA SHEET**

**Issuing Date** 1/5/16      **Revision Date** 10/14/2014      **Revision Number** 0

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING****GHS Product Identifier**

Product Name:            **Preval**

**Other means of Identification**

Synonyms:    none

**Recommended use of the chemical and restrictions on use**

**Recommended Use:**        No information available

**Uses advised against:**    No information available

**2. HAZARD IDENTIFICATION****Classification**

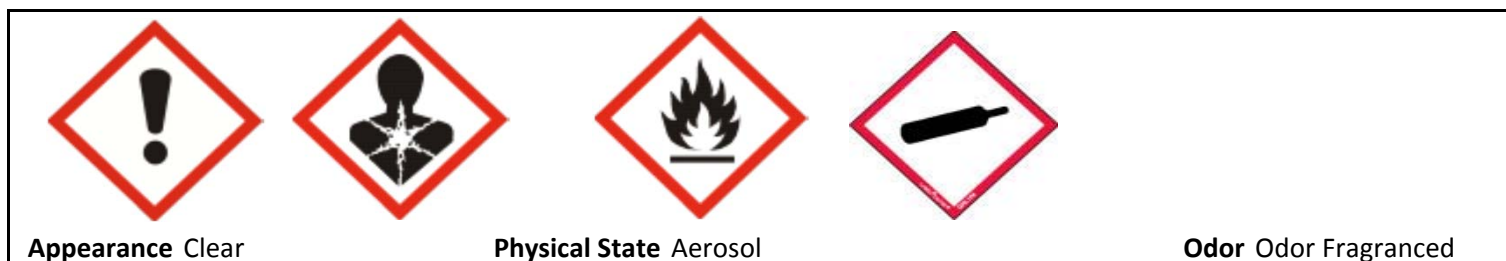
Serious Eye Damage/Eye Irritation	Category 2A
Specific Target Organ Systemic toxicity (Single Exposure)	Category 3
Simple Asphyxiant	Yes
Flammable Aerosols	Category 1
Gases Under Pressure	

**GHS label elements, including precautionary statements****EMERGENCY OVERVIEW**

**Signal Word**            **Danger**

**Hazard Statements**

- Causes serious eye irritation
  
- May cause respiratory irritation
- May cause drowsiness or dizziness
- Extremely flammable aerosol

**Precautionary Statements****Prevention**

- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Use personal protective equipment as required.
- Wash face, hands and any exposed skin thoroughly after handling.
- Wear eye/face protection.
- Avoid breathing dust/fume/gas/mist/vapors/spray.
- Use only outdoors or in a well-ventilated area.
- Keep away from heat/sparks/open flames/hot surfaces - No smoking.
- Do not spray on an open flame or other ignition source.
- Pressurized container: Do not pierce or burn, even after use.

**General Advice**

- If exposed or concerned: Get medical attention/advice

**Eyes**

- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice/attention.

**Inhalation**

- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**Storage**

- Store locked up.
- Store in a well-ventilated place. Keep container tightly closed.
- Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F

**Disposal**

- Dispose of contents/container to an approved waste disposal plant.

**Hazard Not Otherwise Classified (HNOC)**

Rapid evaporation of the liquid may cause frostbite.

**Other information**

May be harmful if inhaled. Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	Trade Secret
Dimethyl Ether	115-10-6	< 55	*
Isobutane	75-28-5	< 30	*
Propane	74-98-6	< 30	*

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*\*The exact percentage (concentration) of composition has been withheld as a trade secret.*

#### 4. FIRST AID MEASURES

##### Description of necessary first-aid measures

<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention immediately if irritation persists.
<b>Skin Contact</b>	Wash off with warm water and soap. In case of contact with liquefied gas, thaw frosted parts with lukewarm water. Get medical attention if symptoms occur.
<b>Inhalation</b>	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
<b>Ingestion</b>	Not an expected route of exposure

##### Most important symptoms/effects, acute and delayed

**Most Important Symptoms/Effects** Eye irritation/reactions. Frostbite. Drowsiness. Dizziness. Simple asphyxiant.

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

**Notes to Physician** Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

##### Suitable Extinguishing Media

Carbon dioxide (CO<sub>2</sub>). Dry chemical. Alcohol-resistant foam. Water fog.

**Unsuitable Extinguishing Media** No information available.

##### Specific Hazards Arising from the Chemical

No information available.

**Hazardous Combustion Products** Thermal decomposition can lead to release of irritating and toxic gases and vapors: Carbon oxides. Nitrogen oxides (NO<sub>x</sub>).

##### Explosion Data

**Sensitivity to Mechanical Impact** Yes

**Sensitivity to Static Discharge** Yes

##### Protective Equipment and Precautions 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

**Personal Precautions** Contents under pressure. Remove all sources of ignition. Do not puncture or incinerate cans. Avoid contact with skin, eyes and clothing. Do not touch damaged containers or spilled material

##### Environmental Precautions

**Environmental Precautions** See Section 12 for additional Ecological Information.

##### Methods and materials for containment and cleaning up

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Cleaning Up** Pick up and transfer to properly labeled containers. Cover liquid spill with sand, earth or other noncombustible absorbent material. Clean contaminated surface thoroughly.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Handling** Contents under pressure. Keep away from open flames, hot surfaces and sources of ignition. Avoid contact with skin, eyes and clothing.

### Conditions for safe storage, including any incompatibilities

**Storage** Store in a cool, dry area away from potential sources of heat, open flames, sunlight or other chemicals.

**Incompatible Products** Strong oxidizing agents.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Dimethyl Ether 115-10-6	TWA: 1000 ppm	TWA: 1000 ppm	TWA: 1000 ppm

### Appropriate engineering controls

**Engineering Measures** Showers  
Eyewash stations  
Ventilation systems

### Individual protection measures, such as personal protective equipment

**Eye/Face Protection** No protective equipment is needed under normal use conditions. Risk of contact, wear: Safety glasses with side-shields.

**Skin and Body Protection** No protective equipment is needed under normal use conditions. Lightweight protective clothing. Protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

**Respiratory Protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

Physical State	Aerosol	Appearance	Clear
Odor	ether	Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks/ - Method</u>
pH	No data available	Enter here
Melting Point/Range	No data available	Enter here
Boiling Point/Boiling Range	-42.2 to -11.7° C	for concentrate
Flash Point	No data available	
Evaporation rate	No data available	Enter here
Flammability (solid, gas)	No data available	Enter here
Flammability Limits in Air	No data available	Enter here
upper flammability limit	No data available	Enter here
lower flammability limit	No data available	Enter here
Vapor Pressure	45-55 psig @ 70 F	Enter here
Vapor Density	No data available	Enter here
Specific Gravity	0.6	water = 1
Water Solubility	3.50%	Enter here
Solubility in other solvents	No data available	Enter here
Partition coefficient: n-octanol/water	No data available	Enter here
Autoignition Temperature	No data available	Enter here
Decomposition Temperature	No data available	Enter here
Viscosity	No data available	Enter here
Flammable Properties	Not Flammable	Enter here
Explosive Properties	No data available	Enter here
Oxidizing Properties	No data available	Enter here
<u>Other information</u>		
VOC Content (%)	100%	

## 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions.

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

None under normal processing.

### Hazardous Polymerization

Hazardous polymerization does not occur.

### Conditions to avoid

Heat, flames and sparks.

### Incompatible materials

Strong oxidizing agents

### Hazardous decomposition products

Carbon oxides. Nitrogen oxides (NOx).

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

<b>Inhalation</b>	May cause irritation of respiratory tract. May cause drowsiness and dizziness. Intentional misuse by deliberately concentrating and inhaling contents may be
<b>Eye Contact</b>	Contact with eyes may cause serious eye irritation based on the components present within the product.
<b>Skin Contact</b>	Contact with product may cause frostbite.
<b>Ingestion</b>	May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Dimethyl Ether		-	=308.5 mg/L
Isobutane			658 mg/L
Propane			658 mg/L

**Symptoms related to the physical, chemical and toxicological characteristics**

<b>Symptoms</b>	Eye contact with liquid may cause irritation including stinging, burning, tearing, or reddening of the eyes. Avoid skin contact with leaking liquid (danger of frostbite).
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**Delayed and immediate effects and also chronic effects from short and long term exposure**

<b>Sensitization</b>	No information available.
<b>Mutagenic Effects</b>	No information available.
<b>Carcinogenicity</b>	No information available.

Chemical Name	ACGIH	IARC	NTP	OSHA

<b>Reproductive Toxicity</b>	No information available.
<b>STOT - single exposure</b>	May cause respiratory irritation. May cause drowsiness or dizziness.
<b>STOT - repeated exposure</b>	No information available.
<b>Aspiration Hazard</b>	No information available.

**Numerical measures of toxicity - Product**

*The following values are calculated based on chapter 3.1 of the GHS document:*

**LD50 Oral**

**LD50 Dermal**

**Inhalation**

## Vapor

## 12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)

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**Persistence and Degradability** No information available.

**Bioaccumulation** No information available.

Chemical Name	Log Pow
Dimethyl Ether	-0.18
Isobutane	2.89
Propane	2.3

Other Adverse Effects

No information available.

## 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Methods** Dispose of in accordance with federal, state, and local regulations.

**Contaminated Packaging** Do not re-use empty containers.

## 14. TRANSPORT INFORMATION

DOT

**Proper shipping name** Consumer commodity  
**Hazard Class** ORM-D  
**Description** Consumer commodity, ORM-D  
**Emergency Response Guide Number** 126

TDG

**UN-Number** UN1950  
**Proper Shipping Name** Aerosols  
**Hazard Class** 2.1  
**Description** UN1950, Aerosols, 2.1

MEX

**UN-Number** UN1950  
**Proper Shipping Name** Aerosols  
**Hazard Class** 2.1  
**Description** UN1950, Aerosols, 2.1

ICAO

**UN-Number** ID8000  
**Proper Shipping Name** Consumer commodity  
**Hazard Class** 9  
**Description** ID8000, Consumer commodity, 9

**IATA**

**UN-Number** ID8000  
**Proper Shipping Name** Consumer commodity  
**Hazard Class** 9  
**ERG Code** 9L  
**Description** ID8000, Consumer commodity, 9

**IMDG/IMO**

**UN-Number** UN1950  
**Proper Shipping Name** Aerosols  
**Hazard Class** 2  
**EmS No.** F-D, S-U  
**Description** UN1950, Aerosols, 2.1 (18.3°C o.c.)

<b>15. REGULATORY INFORMATION</b>
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**International Inventories**

**TSCA** All components of this product are either listed or are exempt on the TSCA inventory.  
**DSL** Substances comply or are exempt

**Legend**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**U.S. Federal Regulations**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %

**SARA 311/312 Hazard Categories**

**Acute Health Hazard** Yes  
**Chronic Health Hazard** Yes  
**Fire Hazard** Yes  
**Sudden Release of Pressure Hazard** Yes  
**Reactive Hazard** No

**Clean Water Act**

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances

**CERCLA**

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ



**U.S. State Regulations****California Proposition 65**

Chemical Name	CAS-No	California Prop. 65

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island

**U.S. EPA Label Information**

EPA Pesticide Registration Number      Not applicable

**16. OTHER INFORMATION**

<b><u>NFPA</u></b>	<b>Health Hazard 2</b>	<b>Flammability 4</b>	<b>Instability 0</b>	<b>Physical and Chemical Hazards</b>
<b><u>HMIS</u></b>	<b>Health Hazard 2*</b>	<b>Flammability 4</b>	<b>Physical Hazard 0</b>	<b>Personal Protection X</b>

*\*Indicates a chronic health hazard.***General Disclaimer**

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text

**End of Safety Data Sheet**