

**SAFETY DATA SHEET**

Issuing Date 5/7/15

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**Supplier's Details****Supplier Address**Chicago Aerosol  
1300 North St.  
Coal City, IL 60416  
Tel: 815-634-5100**Emergency telephone number****Emergency Telephone** 1-866-634-5100  
**Number** Chemtrec 1-800-424-9300**2. HAZARD IDENTIFICATION****Classification**

|                                                           |             |
|-----------------------------------------------------------|-------------|
| Serious Eye Damage/Eye Irritation                         | Category 2A |
| Carcinogenicity                                           | Category 2  |
| 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
- Suspected of causing cancer
- May cause respiratory irritation
- May cause drowsiness or dizziness
- Extremely flammable aerosol

|                                                                                   |                                                                                   |                                                                                   |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|  |  |  |
| <b>Appearance</b> Clear                                                           | <b>Physical State</b> Aerosol                                                     | <b>Odor</b> Odor Fragranced                                                       |

**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     | *            |
|                |          |          |              |
|                |          |          |              |

|  |  |  |  |
|--|--|--|--|
|  |  |  |  |
|--|--|--|--|

*\*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<br>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                            | -104 ° C          | Open cup ( for pure ethanol) |
| 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                   |

Other information

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). |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**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>   | Ethanol has been shown to be carcinogenic in long-term studies only when consumed and abused as an alcoholic beverage. Vinyl acetate is identified by IARC and ACGIH as a potential carcinogen based on data in animal studies. Lifetime exposure to high vapor concentrations (600 ppm) of Vinyl acetate caused malignant and benign tumors of the respiratory tract of rats, but not in mice: this response possibly being associated with the irritant effect. Vinyl acetate has been tested for carcinogenic potential in rats in two separate drinking water studies. In one study, in which animals were exposed to concentrations up to 0.5% in water, there was no evidence of carcinogenicity. In the second study, conducted at higher concentrations (up to 1% in water), evidence of cancer in the stomach and oral cavities was observed. There is no evidence that vinyl acetate causes cancer in humans. |

| 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) |
|---------------|-------------------|------------------|----------------------------|----------------------------|
|               |                   |                  |                            |                            |

|  |  |  |  |  |
|--|--|--|--|--|
|  |  |  |  |  |
|--|--|--|--|--|

**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> |
|-----------------------------------|

**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 |
|---------------|--------------------------|------------------------------------|----|
|               |                          |                                    |    |

