SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : A00123 MST WINDOW & WINDSHIELD  20net19
Material number : 00000000001001468

Manufacturer or supplier’s details

Company : Zep Inc.
Address : 1310 Seaboard Industrial Blvd., NW
          Atlanta, GA 30318
Telephone : 404-352-1680

Emergency telephone numbers

For SDS Information : Compliance Services 1-877-428-9937
For a Medical Emergency : 877-541-2016 Toll Free - All Calls Recorded
For a Transportation Emergency : CHEMTREC: 800-424-9300 - All Calls Recorded.
                              In the District of Columbia 202-483-7616

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Aerosol containing a liquefied gas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>colourless, clear</td>
</tr>
<tr>
<td>Odour</td>
<td>like fruit</td>
</tr>
</tbody>
</table>

GHS Classification

Gases under pressure : Liquefied gas

GHS Label element

Hazard pictograms : 

Signal word : Warning

Hazard statements : H280 Contains gas under pressure; may explode if heated.

Precautionary statements : Storage:
P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.
P403 Store in a well-ventilated place.

Potential Health Effects

Carcinogenicity:

IARC : No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed
human carcinogen by IARC.

**ACGIH**
Confirmed animal carcinogen with unknown relevance to humans
- Ethanol: 64-17-5
- 2-Butoxyethanol: 111-76-2

**OSHA**
No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP**
No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance / Mixture**: Mixture

**Hazardous components**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Concentration [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propane</td>
<td>74-98-6</td>
<td>&gt;= 1 - &lt; 5</td>
</tr>
<tr>
<td>Ethanol</td>
<td>64-17-5</td>
<td>&gt;= 1 - &lt; 5</td>
</tr>
<tr>
<td>Butane</td>
<td>106-97-8</td>
<td>&gt;= 1 - &lt; 5</td>
</tr>
<tr>
<td>2-Butoxyethanol</td>
<td>111-76-2</td>
<td>&gt;= 1 - &lt; 5</td>
</tr>
</tbody>
</table>

### SECTION 4. FIRST AID MEASURES

**General advice**: Do not leave the victim unattended. Get medical attention immediately if symptoms occur. Show this safety data sheet to the doctor in attendance.

**If inhaled**: If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

**In case of skin contact**: If skin irritation persists, call a physician. Wash off immediately with plenty of water for at least 15 minutes. If on clothes, remove clothes.

**In case of eye contact**: Remove contact lenses. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Keep eye wide open while rinsing.

**If swallowed**: Clean mouth with water and drink afterwards plenty of water. Keep respiratory tract clear. DO NOT induce vomiting unless directed to do so by a physician or poison control center.

### SECTION 5. FIREFIGHTING MEASURES

**Suitable extinguishing media**: Dry chemical
- Carbon dioxide (CO2)
SAFETY DATA SHEET

A00123 MST WINDOW & WINDSHIELD 20net19

Version 1.1 Revision Date 02/12/2015 Print Date 06/29/2015

Foam

Unsuitable extinguishing media: High volume water jet

Specific hazards during firefighting: Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products: Carbon dioxide (CO2)
Carbon monoxide
Smoke

Specific extinguishing methods: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Further information: Standard procedure for chemical fires. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special protective equipment for firefighters: Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Environmental precautions: Prevent further leakage or spillage if safe to do so.

Methods and materials for containment and cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up or vacuum up spillage and collect in suitable container for disposal. Neutralise with acid.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling: Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage: BEWARE: Aerosol is pressurized. Keep away from direct sun exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects.
Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

Materials to avoid: Oxidizing agents
Do not freeze.

Storage temperature: < 49 °C

SECTION 8. EXPOSURE CONTROLS/PERSOAL PROTECTION

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>propane</td>
<td>74-98-6</td>
<td>TWA</td>
<td>1,000 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>1,800 mg/m³</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>1,000 ppm 1,800 mg/m³</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>1,000 ppm 1,800 mg/m³</td>
<td>OSHA Z-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>1,000 ppm 1,800 mg/m³</td>
<td>OSHA P0</td>
</tr>
<tr>
<td>ethanol</td>
<td>64-17-5</td>
<td>TWA</td>
<td>1,000 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>1,900 mg/m³</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>1,900 mg/m³</td>
<td>OSHA Z-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>1,900 mg/m³</td>
<td>OSHA P0</td>
</tr>
<tr>
<td>butane</td>
<td>106-97-8</td>
<td>TWA</td>
<td>800 ppm 1,900 mg/m³</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>800 ppm 1,900 mg/m³</td>
<td>OSHA P0</td>
</tr>
<tr>
<td>2-butoxyethanol</td>
<td>111-76-2</td>
<td>TWA</td>
<td>20 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>5 ppm 24 mg/m³</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>50 ppm 240 mg/m³</td>
<td>OSHA Z-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>25 ppm 120 mg/m³</td>
<td>OSHA P0</td>
</tr>
</tbody>
</table>

Biological occupational exposure limits

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Control parameters</th>
<th>Biological specimen</th>
<th>Sampling time</th>
<th>Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-BUTOXYETHANOL</td>
<td>111-76-2</td>
<td>Butoxyacetic acid (BAA)</td>
<td>Urine</td>
<td>End of shift (As soon as possible after exposure ceases)</td>
<td>200 mg/g</td>
<td>ACGIH BEI</td>
</tr>
</tbody>
</table>

Remarks: Creatinine
Personal protective equipment

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection
Remarks: The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection: Eye wash bottle with pure water
Safety glasses
Face-shield

Skin and body protection: impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures: When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Aerosol containing a liquefied gas

Colour: colourless, clear

Odour: like fruit

Odour Threshold: no data available

pH: 10 - 11

Melting point/freezing point: not applicable

Boiling point: no data available

Flash point: not applicable

Evaporation rate: no data available

Flammability (solid, gas): The product is not flammable.

Upper explosion limit: no data available

Lower explosion limit: no data available

Vapour pressure: no data available

Relative vapour density: no data available

Density: 0.993 g/cm³

Solubility(ies): Water solubility: completely soluble

Partition coefficient: n-octanol/water: no data available

Auto-ignition temperature: not determined
SECTION 10. STABILITY AND REACTIVITY

Reactivity : Stable
Chemical stability : Stable under normal conditions.
Possibility of hazardous reactions : Vapours may form explosive mixture with air.
Conditions to avoid : Heat, flames and sparks.
Incompatible materials : Oxidizing agents
Hazardous decomposition products : Carbon dioxide (CO2)
                                 : Carbon monoxide

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:
    Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg
                        Method: Calculation method
    Acute inhalation toxicity : Acute toxicity estimate : > 10 mg/l
                                Exposure time: 4 h
                                Test atmosphere: dust/mist
                                Method: Calculation method
    Acute dermal toxicity : Acute toxicity estimate : > 5,000 mg/kg
                            Method: Calculation method

Skin corrosion/irritation

Product:
Remarks: May cause skin irritation and/or dermatitis.

Serious eye damage/eye irritation

Product:
Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin.

Respiratory or skin sensitisation

no data available
Germ cell mutagenicity
no data available

Carcinogenicity
no data available

Reproductive toxicity
no data available

propane:
ethanol:
butane:
2-butoxyethanol:

STOT - single exposure
no data available

STOT - repeated exposure
no data available

Aspiration toxicity
no data available

Further information

Product:
Remarks: no data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity
no data available

Persistence and degradability
no data available

Bioaccumulative potential

Product:
Partition coefficient: n-octanol/water

Components:
butane:
Partition coefficient: n-octanol/water: Pow: 2.89

Mobility in soil
no data available

Other adverse effects
no data available

Product:
SAFETY DATA SHEET

A00123 MST WINDOW & WINDSHIELD  20net19

Version 1.1  Revision Date 02/12/2015  Print Date 06/29/2015

Regulation  40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks  This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information  : no data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues  : Dispose of in accordance with local regulations.

Contaminated packaging  : Empty remaining contents.
                        : Dispose of as unused product.
                        : Do not re-use empty containers.
                        : Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION

Transportation Regulation: 49 CFR (USA): ORM-D, CONSUMER COMMODITY

Transportation Regulation: IMDG (Vessel): UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, - Limited quantity

Transportation Regulation: IATA (Cargo Air): UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, - Limited quantity

Transportation Regulation: IATA (Passenger Air): UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, - Limited quantity

Transportation Regulation: TDG (Canada): UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, - Limited quantity

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity
Components | CAS-No. | Component RQ (lbs) | Calculated product RQ (lbs)
---|---|---|---
2,2'-iminodiethanol | 111-42-2 | 100 | *

*: Calculated RQ exceeds reasonably attainable upper limit.

**SARA 304 Extremely Hazardous Substances Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards**: Sudden Release of Pressure Hazard

**SARA 302**: SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313**: SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**California Prop 65**

WARNING! This product contains a chemical known to the State of California to cause cancer.

2,2'-iminodiethanol 111-42-2

The components of this product are reported in the following inventories:

**TSCA**: On TSCA Inventory

**DSL**: This product contains one or several components that are not on the Canadian DSL nor NDSL.

**AICS**: Not in compliance with the inventory

**NZIoC**: Not in compliance with the inventory

**PICCS**: Not in compliance with the inventory

**IECSC**: Not in compliance with the inventory

**Inventory Acronym and Validity Area Legend:**

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECl (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

**SECTION 16. OTHER INFORMATION**
Further information

NFPA:

- Flammability: 1
- Health: 3
- Instability: 0
- Special hazard.

HMIS III:

- HEALTH: 3
- FLAMMABILITY: 0
- PHYSICAL HAZARD: 2

0 = not significant, 1 = Slight, 2 = Moderate, 3 = High, 4 = Extreme, * = Chronic

OSHA GHS Label Information:

- Hazard pictograms: 
- Signal word: Warning
- Hazard statements: Contains gas under pressure; may explode if heated.
- Precautionary statements: 

Storage: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place.

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. Users should make their own investigations to determine the suitability and applicability of the information for their particular purposes. This SDS has been prepared by the Compliance Services organization supporting this manufacturer, supplier or distributor.

Zep Inc. markets products under well recognized and established brand names such as Zep®, Zep Commercial®, Zep Professional®, Enforcer®, National Chemical™, Selig™, Misty®, Next Dimension™, Petro®, i-Chem®, TimeMist®, TimeWick™, MicrobeMax®, Country Vet®, Konk®, Original Bike Spirits®, Blue Coral®, Black Magic®, Rain-X®, Niagara National™, FC Forward Chemicals®, Rexodan®, Mykal™, and a number of private labeled brands.