SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name: A00110 MST OVN & GRIL CLNR 20n19
Material number: 00000000001001422

Manufacturer or supplier's details
Company: Zep Inc.
Address: 1310 Seaboard Industrial Blvd., NW
Atlanta, GA 30318
Telephone: 404-352-1680

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>beige</td>
</tr>
<tr>
<td>Odour</td>
<td>characteristic</td>
</tr>
</tbody>
</table>

GHS Classification

<table>
<thead>
<tr>
<th>Gases under pressure</th>
<th>Liquefied gas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion</td>
<td>Category 1A</td>
</tr>
<tr>
<td>Serious eye damage</td>
<td>Category 1</td>
</tr>
</tbody>
</table>

GHS Label element

Hazard pictograms: [Image]

Signal word: Danger

Hazard statements: H280 Contains gas under pressure; may explode if heated. H314 Causes severe skin burns and eye damage.

Precautionary statements: Prevention:
P260 Do not breathe dust or mist.
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 + P310 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
P363 Wash contaminated clothing before reuse.

Storage:  
P405 Store locked up.
P410 + P403 Protect from sunlight. Store in a well-ventilated place.

Disposal:  
P501 Dispose of contents/container in accordance with local regulation.

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 No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
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>butane</td>
<td>106-97-8</td>
<td>&gt;= 1 - &lt; 5</td>
</tr>
<tr>
<td>sodium hydroxide</td>
<td>1310-73-2</td>
<td>&gt;= 1 - &lt; 5</td>
</tr>
<tr>
<td>potassium hydroxide</td>
<td>1310-58-3</td>
<td>&gt;= 1 - &lt; 5</td>
</tr>
<tr>
<td>2-methylpentane-2,4-diol</td>
<td>107-41-5</td>
<td>&gt;= 1 - &lt; 5</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.  
Show this safety data sheet to the doctor in attendance.  
Do not leave the victim unattended.
If inhaled: Consult a physician after significant exposure. If unconscious place in recovery position and seek medical advice.

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. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist. Rinse immediately with plenty of water for at least 15 minutes.

If swallowed: Keep respiratory tract clear. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Take victim immediately to hospital.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media: Dry chemical Carbon dioxide (CO2) Foam Water

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.

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
SAFETY DATA SHEET

A00110 MST OVN & GRIL CLNR  20n19

Version 1.1

Revision Date 03/09/2015
Print Date 06/09/2015

Environmental precautions: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

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.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling: Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Do not breathe vapours or spray mist. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Dispose of rinse water in accordance with local and national regulations. Always replace cap after use.

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 after use. Do not spray on flames or red-hot objects. Observe label precautions. Keep in a dry, cool and well-ventilated place. Electrical installations / working materials must comply with the technological safety standards. No smoking.

Materials to avoid: Store and keep away from, oxidizing agents and acids.

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 1,800 mg/m3</td>
<td>ACGIH</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>Substance</td>
<td>CAS Number</td>
<td>TWA</td>
<td>NIOSH REL</td>
<td>OSHA P0</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>------------</td>
<td>---------</td>
<td>----------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>butane</td>
<td>106-97-8</td>
<td>800 ppm</td>
<td>1,900 mg/m³</td>
<td></td>
</tr>
<tr>
<td>sodium hydroxide</td>
<td>1310-73-2</td>
<td>C</td>
<td>2 mg/m³</td>
<td></td>
</tr>
<tr>
<td>potassium hydroxide</td>
<td>1310-58-3</td>
<td>C</td>
<td>2 mg/m³</td>
<td></td>
</tr>
<tr>
<td>2-methylpentane-2,4-diol</td>
<td>107-41-5</td>
<td>C</td>
<td>25 ppm</td>
<td></td>
</tr>
</tbody>
</table>

**Personal protective equipment**

**Respiratory protection**: Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

**Hand protection**

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

**Eye protection**: Ensure that eyewash stations and safety showers are close to the workstation location. Tightly fitting safety goggles.

**Skin and body protection**: Impervious clothing. Choose body protection according to the amount and concentration of the dangerous substance at the workplace.

**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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Aerosol containing a liquefied gas</td>
</tr>
<tr>
<td>Colour</td>
<td>beige</td>
</tr>
<tr>
<td>Odour</td>
<td>characteristic</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>no data available</td>
</tr>
<tr>
<td>pH</td>
<td>&gt; 14</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>no data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>no data available</td>
</tr>
<tr>
<td>Flash point</td>
<td></td>
</tr>
</tbody>
</table>
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: no data available
Solubility(ies):
Water solubility: no data available
Partition coefficient: n-octanol/water: no data available
Auto-ignition temperature: not determined
Thermal decomposition: no data available
Heat of combustion: 4.41 kJ/g

SECTION 10. STABILITY AND REACTIVITY
Reactivity: Stable
Chemical stability: Stable under normal conditions.
Possibility of hazardous reactions: No decomposition if stored and applied as directed.
Vapours may form explosive mixture with air.
Conditions to avoid: Heat, flames and sparks.
Extremes of temperature and direct sunlight.
Incompatible materials: Strong acids and oxidizing agents
Hazardous decomposition products: Carbon oxides

SECTION 11. TOXICOLOGICAL INFORMATION
Acute toxicity
Product:
Acute oral toxicity: Acute toxicity estimate: 4,768 mg/kg
Method: Calculation method

Components:
### Sodium hydroxide:

| Acute dermal toxicity | 1,350 mg/kg |

### 2-methylpentane-2,4-diol:

| Acute oral toxicity | LD50 Oral rat: 3,700 mg/kg |

### Skin corrosion/irritation

**Product:**

Remarks: Extremely corrosive and destructive to tissue.

### Serious eye damage/eye irritation

**Product:**

Remarks: May cause irreversible eye damage.

### Respiratory or skin sensitisation

no data available

### Germ cell mutagenicity

no data available

### Carcinogenicity

no data available

### Reproductive toxicity

no data available

- propane:
- butane:
- sodium hydroxide:
- potassium hydroxide:
- 2-methylpentane-2,4-diol:

### STOT - single exposure

no data available

### STOT - repeated exposure

no data available

### Aspiration toxicity

no data available

### Further information

**Product:**

Remarks: no data available

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### SECTION 12. ECOLOGICAL INFORMATION

**Ecotoxicity**
no data available

**Persistence and degradability**

no data available

**Bioaccumulative potential**

**Product:**
- Partition coefficient: n-octanol/water
- Remarks: no data available

**Components:**
- Butane:
  - Partition coefficient: n-octanol/water
  - Pow: 2.89
- 2-methylpentane-2,4-diol:
  - Partition coefficient: n-octanol/water
  - Pow: 0.58

**Mobility in soil**

no data available

**Other adverse effects**

no data available

**Product:**
- 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
### SECTION 15. REGULATORY INFORMATION

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

**CERCLA Reportable Quantity**

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Component RQ (lbs)</th>
<th>Calculated product RQ (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium hydroxide</td>
<td>1310-73-2</td>
<td>1000</td>
<td>*</td>
</tr>
</tbody>
</table>

*: 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
- Acute Health 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**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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

- **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
Further information

**NFPA:**

- **Flammability:** 0
- **Health:** 1
- **Reactivity:** 3

**Special hazard:**

**OSHA GHS Label Information:**

- **Hazard pictograms:**
  - Flammable
  - Corrosive

- **Signal word:** Danger
- **Hazard statements:** Contains gas under pressure; may explode if heated. Causes severe skin burns and eye damage.
- **Precautionary statements:**
  - **Prevention:** Do not breathe dust or mist. Wash skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.
  - **Response:** IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ show er. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. Wash contaminated clothing before reuse.
  - **Storage:** Store locked up. Protect from sunlight. Store in a well-ventilated place.
  - **Disposal:** Dispose of contents/container in accordance with local regulation.

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