SAFETY DATA SHEET
Classification according to the regulation OSHA 29 CFR 1900.1200 HCS 2012

Issuing Date 03-Nov-2014 Revision date 03-Nov-2014 Revision Number 2

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Identifier
Product name MICHEMLUBE 270R
Product code ML270R

Recommended use of the chemical and restrictions on use
Recommendations on Use Industrial use
Uses advised against No information available

Details of the supplier of the safety data sheet
Manufacturer Michelman, Inc.
9080 Shell Road
Cincinnati, Ohio 45236
(513)793-7766

Emergency Telephone Number
Emergency Telephone CHEMTREC: +1-703-527-3887 (INTERNATIONAL)
1-800-424-9300 (NORTH AMERICA)

2. HAZARDS IDENTIFICATION

Classification
OSHA Regulatory Status
This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122)

Signal Word None
Hazard statements None
Pictograms None

Precautionary Statements - Prevention
None

Hazards Not Otherwise Classified (HNOC)
Not applicable

OTHER INFORMATION
None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature of the preparation Anionic paraffin/polyethylene wax emulsion.
Michelman formulas are confidential and proprietary. Therefore, a percent range is provided for the concentration of each classified component in this mixture.

The product contains no substances known to be hazardous to health in concentrations which need to be taken into account

### 4. FIRST AID MEASURES

**FIRST AID MEASURES**

- **Eye Contact**: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
- **Skin contact**: Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.
- **Inhalation**: Move to fresh air. If symptoms persist, call a physician.
- **Ingestion**: Rinse mouth. If symptoms persist, call a physician.

**Most important symptoms and effects, both acute and delayed**

| Most Important Symptoms/Effects | No information available. |

**Indication of any immediate medical attention and special treatment needed**

- **Notes to Physician**: Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**

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

**Extinguishing media which shall not be used for safety reasons**

Keep away from heat and sources of ignition.

**Specific hazards arising from the chemical**

No information available.

**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**: Ensure adequate ventilation.
- **Environmental precautions**: Do not allow material to contaminate ground water system.
- **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.

### 7. HANDLING AND STORAGE

**Precautions for safe handling**

- **Handling**: Handle in accordance with good industrial hygiene and safety practice.

**Conditions for safe storage, including any incompatibilities**
Storage

Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Products

None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure guidelines

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face Protection

Tightly fitting safety goggles.

Skin and body protection

Long sleeved clothing. Protective gloves.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA 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

liquid

Appearance

cream

Odor

No information available

Freezing Point

0 °C

Odor Threshold

No information available

Vapor Pressure

No information available

Vapor Density

No information available

pH

8.5-9.5

Density

8.07

Melting/Freezing Point

no data available

Boiling Point/Boiling Range

No data available

Flash Point

Not flammable

Evaporation Rate

no data available

Flammability (solid, gas)

no data available

Flammability Limits in Air

Upper Flammability Limit

No information available

Lower Flammability Limit

No information available
**Specific Gravity**
0.970

**Water Solubility**
no data available

**Partition Coefficient:**
n-octanol/water
No information available

**Autoignition Temperature**
no data available

**Decomposition Temperature**
No information available

**Viscosity**
<1000 cps

### 10. STABILITY AND REACTIVITY

**Reactivity**
No data available.

**Chemical stability**
Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**
None under normal processing.

**Conditions to avoid**
Extremes of temperature and direct sunlight.

**Incompatible materials**
None known based on information supplied.

**Hazardous decomposition products**
None known based on information supplied.

### 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

**Product Information**

- **Inhalation**
  Not an expected route of exposure.

- **Eye contact**
  There is no data available for this product.

- **Skin contact**
  There is no data available for this product.

- **Ingestion**
  There is no data available for this product.

**Acute toxicity**

**Component Information**
No information available

**Information on toxicological effects**

**Symptoms**
No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

- **Carcinogenicity**
  Contains no ingredients above reportable quantities listed as a carcinogen

- **Irritation**
  No information available.

- **Sensitization**
  No information available.
Mutagenic Effects  No information available.
Reproductive toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Aspiration Hazard No information available.

Numerical measures of toxicity - Product Information
The following values are calculated based on chapter 3.1 of the GHS document.

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATEmix (oral)</td>
<td>16186 mg/kg</td>
</tr>
<tr>
<td>ATEmix (dermal)</td>
<td>16976 mg/kg</td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

Ecotoxicity
39.33123% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Persistence and degradability No information available.
Mobility No information available
Bioaccumulation No information available

Other adverse effects
Endocrine system None known

13. DISPOSAL CONSIDERATIONS

Waste treatment methods
Waste Disposal Method
This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated Packaging
Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

DOT Not regulated
IATA Not regulated
IMDG Not regulated

15. REGULATORY INFORMATION

International Inventories
TSCA (USA) Complies
DSL (Canada)  Complies
EINECS (Europe)  Complies
ENCS (Japan)  Complies
IECSC (China)  Complies
KECL (Korea)  Complies
PICCS (Philippines)  Complies
AICS (Australia)  Complies
ERMA (New Zealand)  Complies
Taiwan  This product complies with TECS

WHMIS Hazard Class
Non-controlled

Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories
- Acute health hazard: No
- Chronic Health Hazard: No
- Fire hazard: No
- Sudden release of pressure hazard: No
- Reactive Hazard: No

Clean Water Act

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
<th>CWA - Hazardous Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>SODIUM HYDROXIDE</td>
<td>1000 lb</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>1310-73-2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) and Volatile Organic Compounds (VOCs) (see 40 CFR 61)

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>HAPS data</th>
<th>Volatile organic compounds</th>
<th>Class 1 Ozone Depletors</th>
<th>Class 2 Ozone Depletors</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROPYLENE GLYCOL</td>
<td>57-55-6</td>
<td>2.12</td>
<td>Present</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIPROPYLENE GLYCOL</td>
<td>25265-71-8</td>
<td>.064</td>
<td>Present</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CERCLA

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Hazardous Substances Reportable Quantities</th>
<th>Extremely Hazardous Substances RQs</th>
<th>RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>SODIUM HYDROXIDE</td>
<td>1000 lb</td>
<td></td>
<td>RQ 1000 lb final RQ</td>
</tr>
<tr>
<td>1310-73-2</td>
<td></td>
<td></td>
<td>RQ 454 kg final RQ</td>
</tr>
</tbody>
</table>

California Prop. 65
This product does not contain any Proposition 65 chemicals

16. OTHER INFORMATION

HMIS  Health hazard  1  Flammability  0  Stability  0  PPE  B

Prepared by  Michelman, Inc.
Revision date  03-Nov-2014
Reason for revision  No information available

MICHEMLUBE 270R
Disclaimer
The information provided on this MSDS 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 Material Safety Data Sheet