

## SAFETY DATA SHEET

Classification according to the regulation OSHA 29 CFR 1910.1200 HCS 2012

Issuing Date 08-Jul-2019

Revision date 08-Jul-2019

Revision Number 5

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

#### Product Identifier

Product name MICHEM EMULSION 71235  
Product code ME71235

#### 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: +1-703-741-5970 (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 1910.1200)

Signal word Not Hazardous

Hazard statements None

Symbols/Pictograms None

#### **Precautionary Statements - Prevention**

None

#### Hazards Not Otherwise Classified (HNOC)

Not applicable

#### OTHER INFORMATION

None

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Formulas are confidential and proprietary. Therefore, a percent range is provided for the concentration of each classified component in this mixture.

Chemical name	CAS No.	Weight-%	GHS Classification
ETHYLENE GLYCOL	107-21-1	1-4	Acute Tox. 4 (H302)

## 4. FIRST AID MEASURES

### FIRST AID MEASURES

<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists: Get medical advice/attention.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.
<b>Inhalation</b>	Remove to fresh air. If symptoms persist, call a physician.
<b>Ingestion</b>	Rinse mouth. If symptoms persist, call a physician.

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

<b>Most Important Symptoms and Effects</b>	No information available.
--	---------------------------

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

<b>Notes to Physician</b>	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 must not be used for safety reasons

None.

### Specific hazards arising from the chemical

No information available.

### Protective equipment and precautions for firefighters

Wear self-contained breathing apparatus and protective suit.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

<b>Personal precautions</b>	Ensure adequate ventilation. Use personal protective equipment as required.
<b>Environmental precautions</b>	Do not allow into any sewer, on the ground or into any body of water.
<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for cleaning up</b>	Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

<b>Handling</b>	Handle in accordance with good industrial hygiene and safety practice. Use personal protective equipment as required.
-----------------	---

### Conditions for safe storage, including any incompatibilities

<b>Storage</b>	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep from freezing.
<b>Incompatible Products</b>	None known based on information supplied.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure guidelines - U.S.**

Chemical name	ACGIH TLV	ACGIH OEL (STEL)	OSHA PEL	OSHA STEL	NIOSH IDLH	Exposure limits
ETHYLENE GLYCOL	Ceiling: 100 mg/m <sup>3</sup>		(vacated) Ceiling: 50 ppm (vacated) Ceiling: 125 mg/m <sup>3</sup>			Mexico: Ceiling 100 mg/m <sup>3</sup>

**Appropriate engineering controls**

**Engineering Measures**                      Showers  
    Eyewash stations  
    Ventilation systems.

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

**Eye/Face Protection**                      Tight sealing safety goggles.  
**Skin and body protection**                      Long sleeved clothing. Protective gloves.  
**Respiratory protection**                      No special protective equipment required.  
**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**                                        No information available  
**Odor**    characteristic  
**Freezing Point**                                      0 °C  
**Odor Threshold**                                    No information available  
**Vapor Pressure**                                    No information available  
**Vapor Density**                                      No information available  
**pH**    9 - 11  
**Density**    0.98 - 1.02  
**Melting Point / Melting Range**                      No information available  
  
**Boiling Point / Boiling Range**                      No data available  
**Flash Point**                                         Not flammable  
**Evaporation Rate**                                 No data available  
**Flammability (solid, gas)**                              No data available  
**Flammability Limit in Air**  
    **Upper Flammability Limit**                      No information available  
    **Lower Flammability Limit**                      No information available  
**Specific Gravity**                                    0.970

<b>Water Solubility</b>	No data available
<b>Partition Coefficient: n-octanol/water</b>	No information available
<b>Autoignition Temperature</b>	No data available
<b>Decomposition Temperature</b>	No information available
<b>Viscosity</b>	< 1500 cps

## 10. STABILITY AND REACTIVITY

### **Chemical stability**

Stable under recommended storage conditions.

### **Possibility of Hazardous Reactions**

None under normal processing.

### **Conditions to avoid**

Do not freeze

### **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**

<b>Inhalation</b>	Not an expected route of exposure.
<b>Eye contact</b>	No known effect based on information supplied.
<b>Skin contact</b>	No known effect based on information supplied.
<b>Ingestion</b>	No known effect based on information supplied.

### **Acute toxicity**

#### **Component Information**

<b>Chemical name</b>	<b>Oral LD50</b>	<b>Dermal LD50</b>	<b>Inhalation LC50</b>
ETHYLENE GLYCOL 107-21-1	= 4700 mg/kg ( Rat )	= 9530 µL/kg ( Rabbit ) = 10600 mg/kg ( Rat )	-

### **Information on toxicological effects**

<b>Symptoms</b>	None known.
-----------------	-------------

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

<b>Carcinogenicity</b>	Contains no ingredients above reportable quantities listed as a carcinogen
<b>Irritation</b>	None known based on information supplied.
<b>Sensitization</b>	None known based on information supplied.
<b>Mutagenic Effects</b>	None known based on information supplied.
<b>Reproductive toxicity</b>	None known based on information supplied.

**STOT - single exposure** None known based on information supplied  
**STOT - repeated exposure** None known based on information supplied  
**Aspiration Hazard** None known based on information supplied.

**Numerical measures of toxicity - Product Information**

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

**ATEmix (oral)** 8194 mg/kg  
**ATEmix (dermal)** 15616 mg/kg

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

35.97592 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
ETHYLENE GLYCOL 107-21-1	6500 - 13000: 96 h Pseudokirchneriella subcapitata mg/L EC50	41000: 96 h Oncorhynchus mykiss mg/L LC50 16000: 96 h Poecilia reticulata mg/L LC50 static 14 - 18: 96 h Oncorhynchus mykiss mL/L LC50 static 27540: 96 h Lepomis macrochirus mg/L LC50 static 40761: 96 h Oncorhynchus mykiss mg/L LC50 static 40000 - 60000: 96 h Pimephales promelas mg/L LC50 static		46300: 48 h Daphnia magna mg/L EC50

**Persistence and degradability** Persistence and degradability is not known based on information supplied.

**Mobility** The mobility of this product has not been determined

**Bioaccumulation**

Chemical name	Log Pow
ETHYLENE GLYCOL 107-21-1	-1.93

**Other adverse effects**

**Endocrine system** None known

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Disposal of wastes** 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
ENCS (Japan)	Complies
IECSC (China)	Complies
KECL (Korea)	Complies
PICCS (Philippines)	Complies
AICS (Australia)	Complies
ERMA (New Zealand)	Complies
Taiwan	Complies

### Federal Regulations

#### SARA 313

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	SARA 313 - Threshold Values %
ETHYLENE GLYCOL - 107-21-1	1.0
FORMALDEHYDE - 50-00-0	0.1
METHANOL - 67-56-1	1.0

#### 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

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
FORMALDEHYDE 50-00-0	100 lb			X

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

Chemical name	CAS No.	Weight-%	VOC Chemical
ETHYLENE GLYCOL	107-21-1	2.64	Yes
FORMALDEHYDE	50-00-0	.0555	Yes
METHANOL	67-56-1	.0165	Yes
Proprietary VOC		.0031	Yes

Chemical name	CAS No.	Weight-%	HAPS chemical
ETHYLENE GLYCOL	107-21-1	2.64	Yes
FORMALDEHYDE	50-00-0	.0555	Yes
METHANOL	67-56-1	.0165	Yes

#### CERCLA

Chemical name	Hazardous Substances Reportable Quantities	Extremely Hazardous Substances RQs
---------------	--	------------------------------------

ETHYLENE GLYCOL 107-21-1	5000 lb	
FORMALDEHYDE 50-00-0	100 lb	100 lb
METHANOL 67-56-1	5000 lb	

## 16. OTHER INFORMATION

**HMIS**                      **Health hazard** 1                      **Flammability** 0                      **Stability** 0                      **PPE** B

**Prepared by**    Michelman, Inc.

**Revision date**    08-Jul-2019

**Reason for revision**    No information available

**Disclaimer**

The information provided in this data sheet is based on present scientific and technical knowledge and is accurate to the best of Michelman's 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. 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. Michelman makes no warranty of any kind, express or implied, including warranties of merchantability or fitness for a particular purpose, nor any warranty concerning the safe use of this material in the buyer's/user's process or in combination with other substances. In no case shall the descriptions, information, data, or designs provided be considered a part of Michelman's terms and conditions of sale. Since the conditions for the use of the material are not under Michelman's control, it is the buyer's/user's duty to determine the conditions necessary for the safe use of the material. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the material.

**California Proposition 65**



WARNING! This product can expose you to chemicals including those listed below, which is [are] known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Chemical name	California Proposition 65
ETHYLENE GLYCOL 107-21-1	Developmental
FORMALDEHYDE 50-00-0	Carcinogen
METHANOL 67-56-1	Developmental