SAFETY DATA SHEET: MIRO DROPGLOSS (M-03-0001-001-01)

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Revision date: 2/16/2021 Version: 2.0
Sequencing that is fully supported by Miroculus.

SECTION 1: IDENTIFICATION

1.1. Identification
Product form : Mixture
Trade name : MIRO DROPGLOSS
Product code : CU16400
Catalog number : M-03-0001-001-01

1.2. Recommended use and restrictions on use
Use of the substance/mixture : Laboratory use/Manufacturing component/Research

1.3. Manufacturer
Miroculus, Inc.
458 Brannan St.
San Francisco, CA 94107 - USA
contact@miroculus.com
https://www.miroculus.com

1.4. Emergency telephone number
Emergency number provided by supplier : 855.835.2572 (U.S.)
                                      : 760.602.8703 (Outside U.S.)

SECTION 2: HAZARD(S) IDENTIFICATION

2.1. Classification of the substance or mixture
GHS-US classification
   Aspiration hazard, Category 1
   H304 May be fatal if swallowed and enters airways.

Full text of H statements : see section 16
2.2. GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

GHS US labelling

Hazard pictograms (GHS US) : 

Signal word (GHS US) : Danger

Hazard statements (GHS US) : H304 - May be fatal if swallowed and enters airways.

Precautionary statements (GHS US) : P301+P310 - If swallowed: Immediately call a poison center or doctor. P331 - Do NOT induce vomiting.

P405 - Store locked up. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

This product is labeled with the following GHS classifications, as it contains substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations. This product is a proprietary blend and the ingredients and mixture percentages are being withheld as confidential business information.

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary</td>
<td>&gt;90</td>
<td>Asp. Tox. 1, H304</td>
</tr>
</tbody>
</table>

Full text of hazard classes and H-statements : see section 16

SECTION 4: FIRST-AID MEASURES

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation: Allow affected person to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

First-aid measures after eye contact: 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. Get medical advice/attention. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor

4.2. Most important symptoms and effects (acute and delayed)
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3. Immediate medical attention and special treatment, if necessary
No additional information available

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Suitable (and unsuitable) extinguishing media


Unsuitable extinguishing media: Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical
No additional information available

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.
SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.

Hygiene measures : Wash hands, forearms, face thoroughly after handling.

7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Storage conditions : Keep only in the original container in a cool, well ventilated place away from direct sunlight. Keep the container closed when not in use.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

Store Class : Combustible liquid.
SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

| Proprietary mixture | No additional information available |

8.2. Appropriate engineering controls

No additional information available

8.3. Individual protection measures/Personal protective equipment

- **Personal protective equipment**: Avoid all unnecessary exposure.
- **Hand protection**: Wear protective gloves.
- **Eye protection**: Chemical goggles or safety glasses
- **Respiratory protection**: [In case of inadequate ventilation] wear respiratory protection.
- **Other information**: Do not eat, drink, or smoke during use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>A) Appearance</th>
<th>Form: liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Colour: colourless</td>
</tr>
<tr>
<td>B) Odour</td>
<td>Odourless</td>
</tr>
<tr>
<td>C) Odour Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>D) pH</td>
<td>No data available</td>
</tr>
<tr>
<td>E) Melting point/freezing point</td>
<td>Melting point/range: 18 °C (64 °F) – lit.</td>
</tr>
<tr>
<td>F) Initial boiling point and boiling range</td>
<td>287 °C 549 °F – lit.</td>
</tr>
<tr>
<td>G) Flash point</td>
<td>135 °C (275 °F) – closed cup</td>
</tr>
<tr>
<td>H) Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>I) Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>J) Upper/lower flammability or explosive limits</td>
<td>No data available</td>
</tr>
<tr>
<td>K) Vapour pressure</td>
<td>0.004 hPa at 20 °C (68 °F)</td>
</tr>
<tr>
<td></td>
<td>1 hPa at 105.3 °C (221.5 °F)</td>
</tr>
</tbody>
</table>
L) Vapour density 7.82 - (Air = 1.0)
M) Relative density 0.773 g/cm³ at 25 °C (77 °F)
N) Water solubility insoluble
O) Partition coefficient: n-octanol/water log Pow: 8.2 at 25 °C (77 °F)
P) Auto-ignition temperature No data available
Q) Decomposition temperature No data available
R) Viscosity 4.29 mm²/s at 20 °C (68 °F)
S) Explosive properties No data available
T) Oxidizing properties No data available

9.2. Other information
Relative vapour density 7.82 - (Air = 1.0)

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity
No additional information available

10.2. Chemical stability
Not established.

10.3. Possibility of hazardous reactions
Not established.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects
Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified
<table>
<thead>
<tr>
<th>LD50 oral rat</th>
<th>&gt; 5000 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 dermal rabbit</td>
<td>&gt; 3160 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male / female, Experimental value, Dermal, 14 day(s))</td>
</tr>
<tr>
<td>LC50 Inhalation - Rat</td>
<td>&gt; 5.266 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Read-across, Inhalation (aerosol), 14 day(s))</td>
</tr>
</tbody>
</table>

| Skin corrosion/irritation | Not classified |
|---------------------------------------------------------------|
| Serious eye damage/irritation | Not classified |
| Respiratory or skin sensitisation | Not classified |
| Germ cell mutagenicity | Not classified |
| Carcinogenicity | Not classified |
| Reproductive toxicity | Not classified |

<table>
<thead>
<tr>
<th>NOAEL (animal/female, F0/P)</th>
<th>≥ 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 415 (One-Generation Reproduction Toxicity Study)</th>
</tr>
</thead>
<tbody>
<tr>
<td>STOT-single exposure</td>
<td>Not classified</td>
</tr>
<tr>
<td>STOT-repeated exposure</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NOAEL (oral, rat, 90 days)</th>
<th>≥ 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOAEL (dermal, rat/rabbit, 90 days)</td>
<td>&gt; 495 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)</td>
</tr>
<tr>
<td>NOAEC (inhalation, rat, vapour, 90 days)</td>
<td>&gt; 10.4 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Aspiration hazard</th>
<th>May be fatal if swallowed and enters airways.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Potential adverse human health effects and symptoms</td>
<td>Based on available data, the classification criteriae are not met.</td>
</tr>
<tr>
<td>Symptoms/effects after eye contact</td>
<td>Causes serious eye irritation.</td>
</tr>
<tr>
<td>Symptoms/effects after ingestion</td>
<td>May be fatal if swallowed and enters airways.</td>
</tr>
</tbody>
</table>
SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity
No additional information available

12.2. Persistence and degradability

<table>
<thead>
<tr>
<th>Proprietary mixture</th>
<th>Persistence and degradability</th>
<th>Biodegradable in the soil. Readily biodegradable in water.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ThOD</td>
<td></td>
<td>3.46 g O₂/g substance</td>
</tr>
</tbody>
</table>

12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>Proprietary mixture</th>
<th>Partition coefficient n-octanol/water (Log Pow)</th>
<th>8.2 (Experimental value, EU Method A.8: Partition Coefficient, 25 °C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bioaccumulative potential</td>
<td>High potential for bioaccumulation (Log Kow &gt; 5).</td>
<td></td>
</tr>
</tbody>
</table>

12.4. Mobility in soil

<table>
<thead>
<tr>
<th>Proprietary mixture</th>
<th>Surface tension</th>
<th>27.47 mN/m (25 °C, 100 vol %, EU Method A.5: Surface tension)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecology - soil</td>
<td>Adsorbs into the soil.</td>
<td></td>
</tr>
</tbody>
</table>

12.5. Other adverse effects
Other information : Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/ national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Ecology - waste materials : Avoid release to the environment. Hazardous waste due to toxicity.
SECTION 14: TRANSPORT INFORMATION

DOT (US) Not dangerous goods
IMDG Not dangerous goods
IATA Not dangerous goods

SECTION 15: REGULATORY INFORMATION

SARA 302 Components
This material does not contain any components with a section 302 EHS TPQ.

SARA 313 Components
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.

SARA 311/312 Hazards
No SARA Hazards
United States TSCA (Toxic Substances Control Act) inventory

15.2. International Regulations
Canadian DSL (Domestic Substances List)

EU-Regulations
/

National regulations
No additional information available

15.3. US State regulations
Massachusetts Right To Know Components
No components are subject to the Massachusetts Right to Know Act.
Pennsylvania Right To Know Components
  Listed component
New Jersey Right To Know Components
  Listed component
California Prop. 65 Components
This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm
SECTION 16: OTHER INFORMATION

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 11/14/2019

Other information : None.

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

Full text of H-statements:

| H304 | May be fatal if swallowed and enters airways. |

SDS US (GHS HazCom 2012)
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