## SECTION 1: Identification

1.1. Identification

<table>
<thead>
<tr>
<th>Product form</th>
<th>Mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade name</td>
<td>HANDY FLO 465</td>
</tr>
<tr>
<td>Product code</td>
<td>83-465</td>
</tr>
</tbody>
</table>

1.2. Recommended use and restrictions on use

No additional information available

1.3. Supplier

Lucas-Milhaupt, Inc.
5656 South Pennsylvania Ave.
Cudahy, WI 53110 - USA
T (414)-769-6000
LM_SDSinfo@lucasmilhaupt.com - www.Lucasmilhaupt.com

1.4. Emergency telephone number

Emergency number
CHEMTREC within the USA and Canada: 1-800-424-9300
CHEMTREC outside the USA and Canada +1 701-741-5970

## SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

<table>
<thead>
<tr>
<th>Specific target organ</th>
<th>H373</th>
<th>May cause damage to organs through prolonged or repeated exposure.</th>
</tr>
</thead>
</table>

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)

| Warning |

Hazard statements (GHS-US)

| H373 | May cause damage to organs through prolonged or repeated exposure. |

Precautionary statements (GHS-US)

| P260 - Do not breathe dust/fume/gas/mist/vapours/spray. |
| P314 - Get medical advice/attention if you feel unwell. |
| 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

Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene glycol</td>
<td>(CAS-No.) 107-21-1</td>
<td>24 - 40</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

No additional information available
4.2. Most important symptoms and effects (acute and delayed)
No additional information available

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
No additional information available

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

5.3. Special protective equipment and precautions for fire-fighters
No additional information available

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel
No additional information available

6.1.2. For emergency responders
No additional information available

6.2. Environmental precautions
No additional information available

6.3. Methods and material for containment and cleaning up
No additional information available

6.4. Reference to other sections
No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling
No additional information available

7.2. Conditions for safe storage, including any incompatibilities
No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Ethylene glycol (107-21-1)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>ACGIH TWA (ppm)</th>
<th>ACGIH STEL (mg/m³)</th>
<th>ACGIH STEL (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>25 ppm (vapor fraction)</td>
<td>10 mg/m³ (inhalaible particulate matter, aerosol only)</td>
<td>50 ppm (vapor fraction)</td>
</tr>
</tbody>
</table>

8.2. Appropriate engineering controls
No additional information available

8.3. Individual protection measures/Personal protective equipment
No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>No data available</td>
</tr>
<tr>
<td>Odour</td>
<td>No data available</td>
</tr>
</tbody>
</table>
HANDY FLO 465
Safety Data Sheet

Section 9: Physical properties

- Odour threshold: No data available
- pH: No data available
- Melting point: No data available
- Freezing point: No data available
- Boiling point: No data available
- Flash point: No data available
- Relative evaporation rate (butylacetate=1): No data available
- Flammability (solid, gas): No data available
- Vapour pressure: No data available
- Relative vapour density at 20 °C: No data available
- Relative density: No data available
- Solubility: No data available
- Log Pow: No data available
- Auto-ignition temperature: No data available
- Decomposition temperature: No data available
- Viscosity, kinematic: No data available
- Viscosity, dynamic: No data available
- Explosive limits: No data available
- Explosive properties: No data available
- Oxidising properties: No data available

Section 10: Stability and reactivity

- Reactivity: No additional information available
- Chemical stability: No additional information available
- Possibility of hazardous reactions: No additional information available
- Conditions to avoid: No additional information available
- Incompatible materials: No additional information available
- Hazardous decomposition products: No additional information available

Section 11: Toxicological information

- Information on toxicological effects
  - Acute toxicity: Not classified
  - Ethylene glycol (107-21-1)
    | Effect                        | Value            |
    |-------------------------------|------------------|
    | LD50 oral rat                  | 4700 mg/kg       |
    | LD50 dermal rat                | 10600 mg/kg      |
    | ATE US (oral)                  | 4700 mg/kg bodyweight |
    | ATE US (dermal)                | 10600 mg/kg bodyweight |
  - 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
Specific target organ toxicity (single exposure) : Not classified
Specific target organ toxicity (repeated exposure) : May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

<table>
<thead>
<tr>
<th>Ethylene glycol (107-21-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 1</td>
</tr>
<tr>
<td>EC50 Daphnia 1</td>
</tr>
<tr>
<td>LC50 fish 2</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>Ethylene glycol (107-21-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log Pow</td>
</tr>
</tbody>
</table>

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects

<table>
<thead>
<tr>
<th>Ethylene glycol (107-21-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990 Hazardous Air Pollutant (Clean Air Act)</td>
</tr>
</tbody>
</table>

SECTION 13: Disposal considerations

13.1. Disposal methods
No additional information available

SECTION 14: Transport information

Department of Transportation (DOT)
In accordance with DOT
Not applicable

Transportation of Dangerous Goods
Not applicable

Transport by sea
Not applicable

Air transport
Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

<table>
<thead>
<tr>
<th>Ethylene glycol (107-21-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
</tr>
<tr>
<td>Subject to reporting requirements of United States SARA Section 313</td>
</tr>
<tr>
<td>CERCLA RQ</td>
</tr>
</tbody>
</table>
15.2. International regulations

<table>
<thead>
<tr>
<th>Ethylene glycol (107-21-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed on the TCSI (Taiwan Chemical Substance Inventory)</td>
</tr>
</tbody>
</table>

15.3. US State regulations

<table>
<thead>
<tr>
<th>Ethylene glycol (107-21-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. - California - Proposition 65 - Carcinogens List</td>
</tr>
<tr>
<td>U.S. - California - Proposition 65 - Developmental Toxicity</td>
</tr>
<tr>
<td>U.S. - California - Proposition 65 - Reproductive Toxicity - Female</td>
</tr>
<tr>
<td>U.S. - California - Proposition 65 - Reproductive Toxicity - Male</td>
</tr>
<tr>
<td>No significant risk level (NSRL)</td>
</tr>
<tr>
<td>Maximum allowable dose level (MADL)</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>8700 µg/day oral; ingested</td>
</tr>
</tbody>
</table>

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Full text of H-statements:

| H373 |
| May cause damage to organs through prolonged or repeated exposure. |

SDS US (GHS HazCom 2012)

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Lucas-Milhaupt, Inc.