

SECTION 1: Identification

1.1. Identification

Product form : Substance
 Trade name : HANDY FLO 420
 Product code : A00001154

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

Specific target organ toxicity — Repeated exposure, Category 2 H373 May cause damage to organs through prolonged or repeated exposure.

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

Name : HANDY FLO 420

| Name | Product identifier | % |
|-----------------|--------------------|---------|
| Ethylene glycol | (CAS-No.) 107-21-1 | 43 - 50 |

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

3.2. Mixtures

Not applicable

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SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures general : Call a poison center or a doctor if you feel unwell.
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
- First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing. If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
- First-aid measures after ingestion : Rinse mouth. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

- Symptoms/effects after skin contact : Irritation.
- Symptoms/effects after eye contact : Serious damage to eyes.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

- Fire hazard : Highly flammable liquid and vapour.
- Reactivity : Highly flammable liquid and vapour.

5.3. Special protective equipment and precautions for fire-fighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
- Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Avoid contact with skin and eyes.
- Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Ground/bond container and receiving equipment.
- Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| Ethylene glycol (107-21-1) | | |
|----------------------------|---------------------------------|---|
| ACGIH | ACGIH TWA (ppm) | 25 ppm (vapor fraction) |
| ACGIH | ACGIH STEL (mg/m ³) | 10 mg/m ³ (inhalable particulate matter, aerosol only) |
| ACGIH | ACGIH STEL (ppm) | 50 ppm (vapor fraction) |

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Colour : No data available
Odour : No data available
Odour threshold : No data available
pH : No data available
Melting point : Not applicable
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) : Not applicable.
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

9.2. Other information

No additional information available

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SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapour.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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

| Ethylene glycol (107-21-1) | |
|----------------------------|------------------------|
| 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

STOT-single exposure : Not classified

STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

Viscosity, kinematic : No data available

Symptoms/effects after skin contact : Irritation.

Symptoms/effects after eye contact : Serious damage to eyes.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

| Ethylene glycol (107-21-1) | |
|----------------------------|--|
| LC50 fish 1 | 41000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss) |
| EC50 Daphnia 1 | 46300 mg/l (Exposure time: 48 h - Species: Daphnia magna) |
| LC50 fish 2 | 14 - 18 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static]) |

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

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Ethylene glycol (107-21-1)

| | |
|---------|-------|
| Log Pow | -1.93 |
|---------|-------|

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ethylene glycol (107-21-1)

| | |
|--|-----|
| 1990 Hazardous Air Pollutant (Clean Air Act) | Yes |
|--|-----|

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Additional information : Flammable vapours may accumulate in the container.

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

Ethylene glycol (107-21-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory
Subject to reporting requirements of United States SARA Section 313

| | |
|-----------|---------|
| CERCLA RQ | 5000 lb |
|-----------|---------|

15.2. International regulations

Ethylene glycol (107-21-1)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

15.3. US State regulations

⚠ WARNING: This product can expose you to Ethyl alcohol, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

| Component | Carcinogenicity | Developmental toxicity | Reproductive toxicity male | Reproductive toxicity female | No significant risk level (NSRL) | Maximum allowable dose level (MADL) |
|---------------------------|-----------------|------------------------|----------------------------|------------------------------|----------------------------------|-------------------------------------|
| Ethylene glycol(107-21-1) | | X | | | | 8700 µg/day oral; ingested |
| Ethyl alcohol(64-17-5) | X | X | | | | |

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| Component | Carcinogenicity | Developmental toxicity | Reproductive toxicity male | Reproductive toxicity female | No significant risk level (NSRL) | Maximum allowable dose level (MADL) |
|--------------------------|-----------------|------------------------|----------------------------|------------------------------|----------------------------------|-------------------------------------|
| Methyl alcohol(67-56-1) | | X | | | | 47000 µg/day inhalation |
| Phenolphthalein(77-09-8) | X | | | | | |
| Benzene(71-43-2) | X | X | X | | 6.4 µg/day (oral) | 24 µg/day oral |

| Component | State or local regulations |
|---------------------------|--|
| Ethylene glycol(107-21-1) | 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

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

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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