SECTION 1: Identification

1.1. Identification

Product form: Substance
Trade name: Dipropylene Glycol Methyl Ether Acetate
CAS-No.: 88917-22-0
Product code: HP-040955-FP
Formula: C9H18O4
Synonyms: Acetate, 1(or 2)-(2-methoxymethyl-ethoxy)-, propyl / Dipropylene glycol monomethyl ether acetate / Propanol, (2-methoxyethoxy)-, acetate / Dowanol / Propanol, (2-methoxyethoxy)- (dpgmea) / Propanol, 1-(2-methoxyethoxy)-, acetate / Dipropylene glycol methyl ether acetate / Propanol, (2-methoxyethoxy)-(DpGMEA) / PPG-2 Methyl ether acetate / Dipropylene glycol methyl ether acetate / A mixture of RR and RS isomers of: (2-(2-methoxy-1-methylethoxy)-1-methylethyl acetate; (2-(2-methoxy-2-methyl)ethoxy)-1-methylethyl acetate; (2-(2-methoxy-2-methyl)ethoxy)-2-methylethyl acetate; (2-(2-methoxy-1-methylethoxy)-1-methylethyl acetate; (2-(2-methoxy-2-methylethoxy)-1-methylethyl acetate; (2-(2-methoxy-2-methylethoxy)-2-methylethyl acetate; (2-(2-methoxy-1-methylethoxy)-1-methylethyl acetate; (2-(2-methoxy-2-methylethoxy)-1-methylethyl acetate; (2-(2-methoxy-2-methylethoxy)-2-methylethyl acetate; (2-(2-methoxy-1-methylethoxy)-2-methylethyl acetate

1.2. Recommended use and restrictions on use

Use of the substance/mixture: Solvent

1.3. Supplier

Monument Chemical
16717 Jacintoport Blvd.
Houston, TX 77015 - USA
T (281) 452-5951 - F (281) 457-1127
sds@monumentchemical.com - www.monumentchemical.com

1.4. Emergency telephone number

Emergency number: 24 HR CHEMTREC: 1-800-424-9300 (International +1 703-527-3387); 24 HR Emergency Assistance: 1-832-376-2026

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

| Flammable liquids | H227 | Combustible liquid |
| Category 4 |

Full text of H statements: see section 16

2.2. GHS Label elements, including precautionary statements

GHS-US labeling

Signal word (GHS-US): Warning
Hazard statements (GHS-US): H227 - Combustible liquid
Precautionary statements (GHS-US): P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280 - Wear eye protection, protective clothing, protective gloves.
P370+P378 - In case of fire: Use alcohol resistant foam, carbon dioxide (CO2), dry extinguishing powder, Water spray to extinguish.
P403+P235 - Store in a well-ventilated place. Keep cool.
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**

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dipropylene Glycol Methyl Ether Acetate (Main constituent)</td>
<td>(CAS-No.) 88917-22-0</td>
<td>&gt;= 98.5</td>
</tr>
</tbody>
</table>

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

**3.2. Mixtures**

Not applicable

**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: Remove person to fresh air and keep comfortable for breathing. Allow victim to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact: Wash skin with plenty of water. 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 eyes with water as a precaution. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion: Call a poison center/doctor/physician if you feel unwell. Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Potential Adverse human health effects and symptoms: Based on available data, the classification criteria are not met.

Symptoms/effects: Not expected to present a significant hazard under anticipated conditions of normal use.

**4.3. Immediate medical attention and special treatment, if necessary**

Treat symptomatically.

**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**

Fire hazard: Combustible liquid.

Explosion hazard: May form flammable/explosive vapor-air mixture.

Reactivity: The product is non-reactive under normal conditions of use, storage and transport.

**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 environment.

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

General measures: Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.

**6.1.1. For non-emergency personnel**

Emergency procedures: Ventilate spillage area. No open flames, no sparks, and no smoking. Evacuate unnecessary personnel.

**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". Equip cleanup crew with proper protection.

Emergency procedures: Ventilate area.
6.2. Environmental precautions
Avoid release to the environment. 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: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

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. See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Additional hazards when processed: Handle empty containers with care because residual vapors are flammable. Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

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. Wear personal protective equipment. 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 vapor. No open flames. No smoking.

Hygiene measures: 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: Proper grounding procedures to avoid static electricity should be followed.

Storage conditions: Store in a well-ventilated place. Keep cool. Keep only in the original container in a cool, well ventilated place away from: Ignition sources. Keep container closed when not in use. Keep in fireproof place.

Incompatible products: Strong bases. Strong acids.

Incompatible materials: Sources of ignition. Direct sunlight. Heat sources.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
No additional information available

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
Personal protective equipment:
Avoid all unnecessary exposure.

Hand protection:
Protective gloves. Wear protective gloves.

Eye protection:
Safety glasses. Chemical goggles or safety glasses

Skin and body protection:
Wear suitable protective clothing

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment. Wear appropriate mask

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>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear, colorless liquid.</td>
</tr>
<tr>
<td>Color</td>
<td>clear Colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>Sweet</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Freezing point</td>
<td>-25 °C ; -13 ºF</td>
</tr>
<tr>
<td>Boiling point</td>
<td>209 °C ; 408.2 ºF closed cup</td>
</tr>
<tr>
<td>Flash point</td>
<td>87.5 °C ; 189.5 ºF closed cup</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>0.015</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>0.08 mm Hg @20C</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>6.6</td>
</tr>
<tr>
<td>Relative density</td>
<td>0.976</td>
</tr>
<tr>
<td>Molecular mass</td>
<td>190.2 g/mol</td>
</tr>
<tr>
<td>Solubility</td>
<td>Water: 1.96 mg/l</td>
</tr>
<tr>
<td>Log Pow</td>
<td>0.66</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>340 °C ; 644 °F</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>1.21 - 5.35 vol %</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
</tbody>
</table>

#### 9.2. Other information

No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

#### 10.2. Chemical stability

Stable under normal conditions. Combustible liquid. May form flammable/explosive vapor-air mixture.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Not established.

#### 10.4. Conditions to avoid


#### 10.5. Incompatible materials

Strong acids. Strong bases.

#### 10.6. Hazardous decomposition products


### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Effect</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity (oral)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Acute toxicity (dermal)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Acute toxicity (inhalation)</td>
<td>Not classified</td>
</tr>
</tbody>
</table>
Dipropylene Glycol Methyl Ether Acetate
Safety Data Sheet

Dipropylene Glycol Methyl Ether Acetate (88917-22-0)

LD50 oral rat > 5000 mg/kg
LD50 dermal rat > 2000 mg/kg
LC50 inhalation rat (mg/l) > 5.7 mg/l/4h

Skin corrosion/irritation: Not classified
Serious eye damage/irritation: Not classified
Respiratory or skin sensitization: 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: Not classified
Aspiration hazard: Not classified
Viscosity, kinematic: No data available

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: Not classified
Aspiration hazard: Not classified
Viscosity, kinematic: No data available

SECTION 12: Ecological information

12.1. Toxicity
Ecology - general: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Dipropylene Glycol Methyl Ether Acetate (88917-22-0)

LC50 fish 1 151 mg/l Pimephales Promelas; 96hr
EC50 Daphnia 1 2701 mg/l Daphnia Magna; 48hr exposure
ErC50 (algae) > 1000 mg/l green algae; 96hr

12.2. Persistence and degradability

Dipropylene Glycol Methyl Ether Acetate (88917-22-0)

Persistence and degradability: Not established.

12.3. Bioaccumulative potential

Dipropylene Glycol Methyl Ether Acetate (88917-22-0)

Log Pow 0.66
Bioaccumulative potential: Not established.

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects

Other information: Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

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

Additional information: Handle empty containers with care because residual vapors are flammable.
Ecology - waste materials: Avoid release to the environment.
SECTION 14: Transport information

Department of Transportation (DOT)
In accordance with DOT

Transport document description : NA1993 Combustible liquid, n.o.s. (contains Dipropylene Glycol Methyl Ether Acetate), 3, III
UN-No.(DOT) : NA1993
Proper Shipping Name (DOT) : Combustible liquid, n.o.s.
contains Dipropylene Glycol Methyl Ether Acetate
Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
Packing group (DOT) : III - Minor Danger
DOT Packaging Non Bulk (49 CFR 173.xxx) : 203
DOT Packaging Bulk (49 CFR 173.xxx) : 241
DOT Symbols : D - Proper shipping name for domestic use only, or to and from Canada,G - Identifies PSN requiring a technical name
DOT Special Provisions (49 CFR 172.102) : IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31H21 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).
T1 - 1.5 178.274(d)(2) Normal............. 178.275(d)(2)
T4 - 2.65 178.274(d)(2) Normal............. 178.275(d)(3)
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.

DOT Packaging Exceptions (49 CFR 173.xxx) : 150
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 220 L
DOT Vessel Stowage Location : A - The material may be stowed “on deck” or “under deck” on a cargo vessel and on a passenger vessel.
Other information : No supplementary information available.

Transport by sea
Not regulated

Air transport
Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations

Dipropylene Glycol Methyl Ether Acetate (88917-22-0) Listed on the United States TSCA (Toxic Substances Control Act) inventory

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

CANADA

Dipropylene Glycol Methyl Ether Acetate (88917-22-0) Listed on the Canadian DSL (Domestic Substances List)
Dipropylene Glycol Methyl Ether Acetate
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

EU-Regulations

<table>
<thead>
<tr>
<th>Dipropylene Glycol Methyl Ether Acetate (88917-22-0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed on ELINCS (European List of Notified Chemical Substances)</td>
</tr>
</tbody>
</table>

National regulations

<table>
<thead>
<tr>
<th>Dipropylene Glycol Methyl Ether Acetate (88917-22-0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed on the AICS (Australian Inventory of Chemical Substances)</td>
</tr>
<tr>
<td>Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)</td>
</tr>
<tr>
<td>Listed on the Japanese ISHL (Industrial Safety and Health Law)</td>
</tr>
<tr>
<td>Listed on the Korean ECL (Existing Chemicals List)</td>
</tr>
<tr>
<td>Listed on NZIoC (New Zealand Inventory of Chemicals)</td>
</tr>
<tr>
<td>Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)</td>
</tr>
<tr>
<td>Listed on the TCSI (Taiwan Chemical Substance Inventory)</td>
</tr>
</tbody>
</table>

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

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

Revision date : 08/26/2018
Other information : None.

Full text of H-phrases:

| H227 | Combustible liquid |

SDS US (GHS HazCom 2012)

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