

## Material Safety Data Sheet

Date Created: 03/07/2009

Date Updated: 02/06/2010

Version: 1.0

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Section 1 - Product And Company Information

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Product Propylene Glycol Monomethyl Ether (PM)  
Product No D01-1  
Company Dynamic N.A. Inc  
Address 23 Captains Walk, Milford, CT 06460, U.S.A.  
Phone 1 914 965 2077  
Fax 1 914 375 2093

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Section 2 - Composition/Information On Ingredients

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Synonyms 1-Methoxy-2-propanol, Monopropylene glycol methyl ether, PM  
CAS # 107-98-2  
Formula C<sub>4</sub>H<sub>10</sub>O<sub>2</sub>

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Section 3 - Hazards Identification

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## SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT

OSHA Hazards: Flammable Liquid

Effect: Irritant

Target Organs: Liver, Kidney

HMIS Classification

Health Hazard: 1

Flammability: 3

Physical hazards: 0

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.

Skin: May be harmful if absorbed through skin. Causes skin irritation.

Eyes: Causes eye irritation.

Ingestion: May be harmful if swallowed.

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Section 4 - First Aid Measures

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INHALATION - Breathed in - remove from into safe area and fresh air. Consult a physician.

SKIN - Wash with soap and rinse with water. Consult a physician.

EYE - Flush eyes with shower of water as a precaution.

INGESTION - Having plenty of water, do not induce vomiting. Rinse mouth with water. Call a physician.

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Section 5 - Fire Fighting Measures

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## FLAMMABLE PROPERTIES

FLASH POINT 34 °C (93 °F) - closed cup

IGNITION TEMPERATURE 278 °C (532 °F)

## EXPLOSION HAZARDS

Vapors may form explosive mixture with air. Vapor travel in distance and may flash back from ignition source.

## EXTINGUISHING MATERIALS

Use foam, dry chemical, carbon dioxide, nitrogen oxides, smoke, part oxidized hydrocarbon fragments.

Cool and dilute with water and water fog.

## SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Wear self contained breathing apparatus for fire fighting.

## FURTHER PROCEDURE

Use water spray to cool containers.

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Section 6 - Accidental Release Measures

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## PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Avoid breathing vapors, mist or gas. Remove all sources of ignition. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

## ENVIRONMENTAL PRECAUTIONS

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Absorb with earth, sand and other non-flammable material.

### CLEANING UP METHODS

Contain and transfer to proper containers for recover or disposal. Flushing the contaminated area with water. Do not let contaminated water enter open water system!

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### Section 7 - Handling and Storage

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#### HANDLING

Avoid inhalation of vapor or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

#### STORAGE

Keep tightly closed. Store in cool, dry and well ventilated place. Avoid direct sunlight exposure.

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### Section 8 - Exposure Controls / Personal Protection

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#### ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

#### GENERAL HYGIENE MEASURES

Wash thoroughly after handling.

#### PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks.

Hand Protection: Protective gloves.

Eye Protection: Chemical safety goggles.

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### Section 9 - Physical And Chemical Properties

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Appearance	Colorless, liquid, clear
Molecular Weight:	90.12 g/mol
Optical Rotation:	N/A
pH	Neutral
BP/BP Range	118 - 119 °C (244 - 246 °F) at 1,013 hPa (760 mmHg)
Flash point	34 °C (93 °F) - closed cup
Ignition Temp	278 °C (532 °F)
Lower explosion limit	1.8 %(V)
Upper explosion limit	16 %(V)
Vapor pressure	14.5 hPa (10.9 mmHg) at 25 °C (77 °F)
Density	0.921 g/cm <sup>3</sup>
Water solubility	completely miscible
Relative vapor Density	3.11- (Air = 1.0)

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### Section 10 - Stability and Reactivity

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#### STABILITY

Stable under recommended storage conditions. May form peroxides on prolonged storage. Date container and periodically test for peroxides.

CONDITIONS TO AVOID: Heat, flames and sparks.

MATERIALS TO AVOID: Strong oxidizing agents

#### HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.

#### HAZARDOUS POLYMERIZATION

Vapors may form explosive mixture with air.

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### Section 11 - Toxicological Information

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#### ACUTE TOXICITY

LD50 Oral - mouse - 11,700 mg/kg

Remarks: Behavioral: Convulsions or effect on seizure threshold. Behavioral: Ataxia. Lungs, Thorax, or

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Respiration: Dyspnea.

LC50 Inhalation - rat - 5 h - 10000 ppm

Inhalation: Irritating to respiratory system.

LD50 Dermal - rabbit - 13,000 mg/kg

Irritation and corrosion

Skin - rabbit - Open irritation test

Eyes - rabbit - Mild eye irritation - 24 h

Chronic exposure

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

#### POTENTIAL HEALTH EFFECTS

Inhalation May be harmful if inhaled. Causes respiratory tract irritation.

Skin May be harmful if absorbed through skin. Causes skin irritation.

Eyes Causes eye irritation.

Ingestion May be harmful if swallowed.

Target Organs Liver, Kidney,

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#### Section 12 - Ecological Information

DEGRADATION Slow degradable in nature.

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#### Section 13 - Disposal Considerations

##### SUBSTANCE DISPOSAL

MATERIAL - Incinerator as recommended. Follow all federal, state, and local environmental regulations.

Contaminated packaging – Do not remove the labels from containers before cleaning. Dispose the container with care.

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#### Section 14 - Transport Information

##### DOT (US)

UN-Number: 3092

Class: 3

Packing group: III

Proper shipping name: 1-Methoxy-2-propanol

##### IMDG

UN-Number: 3092

Class: 3

Packing group: III EMS-No: F-E, S-D

Proper shipping name: 1-METHOXY-2-PROPANOL

Marine pollutant: No

##### IATA

UN-Number: 3092

Class: 3

Packing group: III

Proper shipping name: 1-Methoxy-2-propanol

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#### Section 15 - Regulatory Information

##### OSHA HAZARDS

Flammable Liquid, Target Organ Effect, Irritant

##### TSCA STATUS

On TSCA Inventory

##### DSL STATUS

All components of this product are on the Canadian DSL list.

##### SARA 302 COMPONENTS

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III,

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Section 302.

SARA 313 COMPONENTS

SARA 313: 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

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

MASSACHUSETTS RIGHT TO KNOW COMPONENTS

Monopropylene glycol methyl ether, CAS-No. 107-98-2, Revision Date 1989-12-01

PENNSYLVANIA RIGHT TO KNOW COMPONENTS

Monopropylene glycol methyl ether, CAS-No. 107-98-2, Revision Date 1989-12-01

NEW JERSEY RIGHT TO KNOW COMPONENTS

Monopropylene glycol methyl ether, CAS-No. 107-98-2, Revision Date 1989-12-01

CALIFORNIA PROP. 65 COMPONENTS

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

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### Section 16 - Other Information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.