

## Material Safety Data Sheet

Date Created: 03/07/2009  
 Date Updated: 02/06/2010  
 Version: 1.0

### Section 1 - Product And Company Information

Product Dipropylene Glycol Dimethyl Ether (DPDM)  
 Product No D005  
 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

### Section 2 - Composition/Information On Ingredients

Synonyms Dimethyl dipropylene glycol, Progylme, DPGDME, DPDM, DMM  
 CAS # 111109-77-4  
 Formula C<sub>8</sub>H<sub>18</sub>O<sub>3</sub>

### Section 3 - Hazards Identification

#### Hazard statement(s)

H227 Combustible liquid  
 H315 Causes skin irritation.  
 H319 Causes serious eye irritation.

#### Precautionary statement(s)

##### Prevention

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
 P264 Wash skin thoroughly after handling.  
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

##### Response

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P321 Specific treatment (see supplemental first aid instructions on this label).  
 P332 + P313 If skin irritation occurs: Get medical advice/ attention.  
 P337 + P313 If eye irritation persists: Get medical advice/ attention.  
 P362 Take off contaminated clothing and wash before reuse.  
 P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

##### Storage

P403 + P235 Store in a well-ventilated place. Keep cool.

##### Disposal

P501 Dispose of contents/ container to an approved waste disposal plant.

### Section 4 - First Aid Measures

#### DESCRIPTION OF FIRST AID MEASURES

##### GENERAL ADVICE

Consult a physician. Show this safety data sheet to the doctor in attendance.

##### IF INHALED

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

##### IN CASE OF SKIN CONTACT

Wash off with soap and plenty of water. Consult a physician.

##### IN CASE OF EYE CONTACT

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

##### IF SWALLOWED

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

##### MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

prolonged or repeated exposure can cause:, Nausea, Headache, Vomiting

##### INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

No data available

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### Section 5 - Fire Fighting Measures

#### EXTINGUISHING MEDIA

##### SUITABLE EXTINGUISHING MEDIA

For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

##### SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Carbon oxides

##### ADVICE FOR FIREFIGHTERS

Wear self contained breathing apparatus for fire fighting if necessary.

##### FURTHER INFORMATION

Use water spray to cool unopened containers.

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### Section 6 - Accidental Release Measures

#### PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

#### ENVIRONMENTAL PRECAUTIONS

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

#### METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

#### REFERENCE TO OTHER SECTIONS

For disposal see section 13.

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### Section 7 - Handling and Storage

#### PRECAUTIONS FOR SAFE HANDLING

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

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

#### CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

#### SPECIFIC END USES

No data available

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### Section 8 - Exposure Controls / Personal Protection

#### CONTROL PARAMETERS

##### OCCUPATIONAL EXPOSURE LIMITS

We are not aware of any national exposure limit.

##### EXPOSURE CONTROLS

##### APPROPRIATE ENGINEERING CONTROLS

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

##### PERSONAL PROTECTIVE EQUIPMENT

##### EYE/FACE PROTECTION

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

##### SKIN PROTECTION

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of

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contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Wash and dry hands.

**BODY PROTECTION**

impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**RESPIRATORY PROTECTION**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Section 9 - Physical And Chemical Properties**

Appearance	Colorless, liquid, clear
Molecular Weight:	162.2 g/mol
Optical Rotation:	N/A
pH	N/A
BP/BP Range	N/A
Flash point	65 °C - closed cup
Ignition Temp	N/A
Lower explosion limit	N/A
Upper explosion limit	N/A
Vapor pressure	N/A
Density	N/A
Water solubility	N/A
Relative Density	0.903 g/cm <sup>3</sup>

**Section 10 - Stability and Reactivity**

Reactivity	No data available
Chemical stability	No data available
Possibility of hazardous reactions	No data available
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	Strong oxidizing agents
<b>HAZARDOUS DECOMPOSITION PRODUCTS</b>	
Other decomposition products	- no data available

**Section 11 - Toxicological Information****INFORMATION ON TOXICOLOGICAL EFFECTS**

ACUTE TOXICITY	No data available
SKIN CORROSION/IRRITATION	No data available
SERIOUS EYE DAMAGE/EYE IRRITATION	No data available
RESPIRATORY OR SKIN SENSITIZATION	No data available
GERM CELL MUTAGENICITY	No data available
<b>CARCINOGENICITY</b>	

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.

REPRODUCTIVE TOXICITY No data available

**SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE**

Inhalation - May cause respiratory irritation.

SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE

No data available

**ASPIRATION HAZARD**

No data available

**POTENTIAL HEALTH EFFECTS**

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

Ingestion: May be harmful if swallowed.

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

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Eyes: Causes serious eye irritation.

### SIGNS AND SYMPTOMS OF EXPOSURE

Prolonged or repeated exposure can cause:, Nausea, Headache, Vomiting

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### Section 12 - Ecological Information

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No data available

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### Section 13 - Disposal Considerations

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#### WASTE TREATMENT METHODS

#### PRODUCT

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

#### CONTAMINATED PACKAGING

Dispose of as unused product

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### Section 14 - Transport Information

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UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

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### Section 15 - Regulatory Information

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#### SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

#### NATIONAL REGULATORY INFORMATION

HSNO Group Standard Approval: HSR002596 - Laboratory Chemicals and Reagent Kits Group Standard 2006

Tracking Required: not required

Approved Handler Cert.: not required

#### NOTIFICATION STATUS

AICS: Not in compliance with the inventory - Dipropylene glycol dimethyl ether

DSL: This product contains the following components that are not on the Canadian

DSL nor NDSL lists. - Dipropylene glycol dimethyl ether

ENCS: Not in compliance with the inventory - Dipropylene glycol dimethyl ether

IECSC: Not in compliance with the inventory - Dipropylene glycol dimethyl ether

ISHL: Not in compliance with the inventory - Dipropylene glycol dimethyl ether

KECI: On the inventory, or in compliance with the inventory

NZIoC: Not in compliance with the inventory - Dipropylene glycol dimethyl ether

PICCS: Not in compliance with the inventory - Dipropylene glycol dimethyl ether

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### Section 16 - Other Information

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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.