

## Global Product Strategy (GPS) Safety Summary

### Dipropylene Glycol Monomethyl Ether

This GPS Safety Summary is a high-level summary intended to provide the general public with an overview of product safety information on this chemical substance. It is not intended to provide emergency response, medical or treatment information, nor to provide an overview of all safety and health information. This summary is not intended to replace the (Material) Safety Data Sheet. For detailed guidance on the use or regulatory status of this substance, please consult the (Material) Safety Data Sheet and the Regulatory Affairs Bulletin (RAB).

#### Chemical Identity

**Name:** Dipropylene Glycol Monomethyl Ether

**Brand names:** *Arcosolv DPM*

**Chemical name (IUPAC):** (2-methoxymethylethoxy)propanol

**CAS number:** 34590-94-8

**EC number:** 252-104-2

**Molecular formula:** C<sub>7</sub>H<sub>16</sub>O<sub>3</sub>

#### Uses and Applications

*Arcosolv DPM* is a versatile solvent with a relatively low vapor pressure (volatility) and slow evaporation rate. It is water miscible and has good solvency with numerous polar and non-polar substances. *Arcosolv DPM* has been selected for use in:

- Coatings, where it provides good solvency for a wide variety of resins including acrylic, epoxies, alkyds, polyesters, nitrocellulose and polyurethanes. Key properties for coating applications include complete water miscibility and good coupling ability.
- Cleaning formulations, wax strippers and floor cleaners that are spread over a large area.
- Agricultural, electronic, ink, textile, cosmetics and adhesive products

#### Physical / Chemical Properties

*Arcosolv DPM* is a colorless liquid with an ether-like odor at room temperature. The substance is considered combustible with a flash point of 75°C (167°F). The boiling and freezing points of *Arcosolv DPM* are 189°C (372°F) and -83°C (-117°F) respectively. *Arcosolv DPM* is not classified as hazardous under the Globally Harmonized System on classification and labeling (GHS).

#### Health Effects

*Arcosolv DPM* is of low acute toxicity by all routes of exposure. It may cause temporary slight eye irritation. Exposure to vapors may cause irritation of the eyes, nose or throat. However, these effects are below the thresholds that would warrant classification under GHS.

The table below gives an overview of the health effects assessment results for *Arcosolv DPM*.

Effect Assessment	Result
Acute Toxicity Oral / inhalation / dermal	Low acute toxicity by all routes of exposure. Exposure to vapors may cause irritation of the eyes, nose or throat.
Irritation / corrosion Skin / eye/ respiratory tract	May cause temporary slight eye irritation.
Sensitisation	Not sensitizing.
Toxicity after repeated exposure Oral / dermal	May cause sedation, enlarged liver, and possible kidney changes during prolonged or high exposures.
Genotoxicity / Mutagenicity	Not mutagenic.
Carcinogenicity	Not considered carcinogenic.
Toxicity for reproduction	Not toxic to reproduction or development.

### **Environmental Effects**

*Arcosolv DPM* is a low ecotoxicity hazard and is therefore not classified under GHS. Furthermore, it does not bio-accumulate, is readily biodegradable and will not persist in the environment.

The table below gives an overview of the environmental effects assessment results for *Arcosolv DPM*.

Effect Assessment	Result
Aquatic Toxicity	Low ecotoxicity hazard to aquatic organisms

Fate and behavior	Result
Biodegradation	Readily biodegradable.
Bioaccumulation potential	Not bio-accumulative.
PBT / vPvB conclusion	Not considered to be either PBT or vPvB.

PBT = Persistent, Bio-accumulative and Toxic in the environment.

vPvB = very Persistent and very Bio-accumulative in the environment.

### **Exposure**

#### Human health

Human exposure can occur resulting from the use of coatings, cleaning agents, agrochemical formulations and other formulations containing *Arcosolv DPM*. None of these uses are expected to pose risks to human health due to the contained *Arcosolv DPM*.

Exposure to *Arcosolv DPM* of personnel in manufacturing facilities is considered very low because the process, storage and handling operations are enclosed. However, worker exposure can potentially happen during operations like product transfer, product sampling, or maintenance / repair activities on product containing systems. The risk of accidental exposure should be controlled by selecting and applying the appropriate Risk Management Measures.

### Environment

Due to its many uses as a functional fluid in formulations, *Arcosolv DPM* has widespread indoor and outdoor environmental release possibilities. None of these applications are expected to pose risks to the environment due to the contained *Arcosolv DPM*.

### **Risk Management Measures**

For detailed guidance on the use of *Arcosolv DPM*, the [\(Material\) Safety Data Sheet](#) should be consulted.

When using an *Arcosolv DPM* containing consumer product at home, all provided instructions and precautions from the supplier should be read, understood and followed. It should never be used near open flames or other ignition sources.

### Human health

When using chemicals make sure that there is adequate ventilation. Always use appropriate chemical-resistant gloves to protect your hands and skin, always wear eye protection such as chemical goggles and always wear flame-retardant clothing. Do not eat, drink, or smoke where chemicals are handled, processed, or stored. Wash hands and skin following contact. If the substance gets into your eyes, rinse eyes thoroughly for at least 15 minutes with tap water and seek medical attention.

In the case of transfer or maintenance operations, always clear transfer lines prior to decoupling, and flush/drain to a closed system for recycle prior to opening equipment.

In cases where engineering controls cannot maintain airborne substance concentrations below exposure limits, or in cases with a risk of accidental exposure, additional risk management measures may be necessary, such as the use of a respirator.

### Environmental

In case of accidental release or spill do not allow the product to enter sewers, surface or ground water.

### **Regulatory Information / Classification and Labeling**

This substance has been registered under REACH by relevant companies of LyondellBasell in the European Union.

For a detailed overview of the regulatory status of this substance, please refer to the [Regulatory Affairs Bulletin](#) which is available from the LyondellBasell corporate website.

Under the Globally Harmonized System on classification and labeling (GHS) substances are classified according to their physical, health and environmental hazards. The hazards are communicated via specific labels on the product packaging and the Safety Data Sheet.

GHS attempts to standardize hazard communication so that the intended audience (workers, consumers, transport workers, and emergency responders) can better understand the hazards of the chemicals in use.

For a detailed overview of the classification and labeling of this substance, please refer to the regional [\(Material\) Safety Data Sheet](#), which can be found on the LyondellBasell corporate website.

### **Conclusion Statements**

- *Arcosolv DPM* is a versatile solvent with relatively low volatility and low evaporation rate. It is used in a wide variety of industrial, professional and consumer products, such as coatings and cleaners, agricultural, electronic, ink, textile, cosmetics and adhesive products.
- *Arcosolv DPM* is not classified as hazardous under GHS.
- *Arcosolv DPM* is of low concern for human health hazards and environment at exposure levels relevant to humans and environment.

### **Contact Information within Company**

For further information on this product in general, please consult the [LyondellBasell corporate website](#).

For specific Product Safety related questions, please contact [PSInfo@lyondellbasell.com](mailto:PSInfo@lyondellbasell.com).

### **Date of issue**

Date of issue: 23 December 2011.

### **Disclaimer**

Before using a product sold by one of the LyondellBasell family of companies, users should make their own independent determination that the product is suitable for the intended use and can be used safely and legally. SELLER MAKES NO WARRANTY; EXPRESS OR IMPLIED (INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE) OTHER THAN AS SEPARATELY AGREED BETWEEN THE PARTIES IN WRITING. This product(s) may not be used in the manufacture of any US FDA Class III Medical Device or Health Canada Class IV Medical Device and may not be used in the manufacture of any US FDA Class II Medical Device or Health Canada Class II or Class III Medical Device without the prior written approval by Seller of each specific product or application.

Users should review the applicable Material Safety Data Sheet before handling the product.

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