



# (Material) Safety Data Sheet

Transport Symbol(s)	WHMIS	NFPA	Personal Protective Equipment
Not controlled	Not controlled		

Original Preparation Date: 01-Mar-2010

Revision Date: 24-Mar-2015

Revision Number: 2

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

**Product Name:**

Propylene Glycol USP, Excipient Grade/EP EVO-100™

**Product Code:**

049000

**Contact Manufacturer:**

Archer Daniels Midland Company

4666 Faries Parkway

Decatur, IL 62526, USA

Telephone Number: (+1) 217-424-5200

**Emergency response telephone number:**

Chemtrec 1-800-424-9300 (CCN 1635)

**Use of the Substance / Preparation:**

Excipient.

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

Health injuries are not known or expected under normal use.

**Appearance**  
Clear Colorless

**Physical State**  
Viscous liquid

**Odor**  
Odorless

This product is NOT classified as hazardous according to 29 CFR 1910, amended to conform to the United Nations' Globally Harmonized System of Classification and Labelling of Chemicals (OSHA / GHS); SOR/88-66, the Canadian Controlled Products Regulations (CPR); and/or NOM-002-SCT-2003 (Mexico).

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical Family** Glycols  
**Molecular Formula** C<sub>3</sub>H<sub>8</sub>O<sub>2</sub>

### Non-hazardous Components

Chemical Name	CAS-No	Weight %	North American Hazard Indicator
1,2-Propylene glycol	57-55-6	99.5	(Present on Canadian Hazardous Products Act Ingredient Disclosure List).
Water	7732-18-5	0.2	None known.

#### 4. FIRST AID MEASURES

##### Description of first aid measures

**Eye Contact** Rinse thoroughly with plenty of water, also under the eyelids.

**Skin Contact** Wash off with warm water and soap.

**Inhalation** Move to fresh air.

**Ingestion** Clean mouth with water and afterwards drink plenty of water.

**General Advice** When symptoms persist or in all cases of doubt seek medical advice.

##### Most important symptoms and affects, both acute and delayed

**Eyes** Contact with eyes may cause irritation.

**Skin** May cause slight skin irritation. Repeated exposure may cause skin dryness or cracking. Contact with product at elevated temperatures can result in thermal burns.

**Inhalation** Avoid breathing vapors or mists. Inhalation of aerosol may cause irritation to respiratory tract.

**Ingestion** Health injuries are not known or expected under normal use. May be harmful if swallowed. (dependent on amounts)

##### Indication of any immediate medical attention and special treatment needed

**Notes to Physician** Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

##### Flammable Properties

Material may pose fire hazard because it is dispersed (or spread) by water.

##### Extinguishing media

**Suitable Extinguishing Media** Dry powder. Alcohol-resistant foam. Carbon dioxide (CO<sub>2</sub>). Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** Do not use a solid water stream as it may scatter and spread fire.

##### Special hazards arising from the substance or mixture

**Hazardous Combustion Products** Thermal decomposition can lead to release of irritating gases and vapors, Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>).

**Specific Hazards Arising from the Chemical** Vapors are heavier than air and may spread along floors. The pressure in sealed containers can increase under the influence of heat. Fire or intense heat may cause violent rupture of packages.

**Sensitivity to mechanical impact** No information available.

**Sensitivity to static discharge** No information available.

##### Advice for fire-fighters

**Protective Equipment and Precautions for Firefighters** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

##### NFPA

**Health** 0

**Flammability** 1

**Stability and Reactivity** 0

**Physical hazard** None known



#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal Precautions, Protective Equipment, and Emergency Procedures

Ensure adequate ventilation. Avoid high pressure washing or generation of aerosols. Use personal protective equipment. Material can create slippery conditions.

##### Environmental Precautions

Prevent further leakage or spillage if safe to do so.

##### Methods and Materials for Containment and Cleaning Up

Clean-up methods - small spillage. Soak up with inert absorbent material. Pick up and transfer to properly labelled containers.

Clean contaminated surface thoroughly. Clean-up methods - large spillage. Dam up. Take up mechanically and collect in suitable container for disposal.

## 7. HANDLING AND STORAGE

### Handling

Ensure adequate ventilation.

### Storage

Keep at temperature not exceeding 40°C / 104°F. Keep containers dry and tightly closed to avoid moisture absorption and contamination. To maintain product quality, do not store in heat or direct sunlight.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure Limits

This product is not known to contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

### Appropriate Engineering Controls

Ensure adequate ventilation, especially in confined areas.

### General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice. When using, do not eat, drink or smoke.

### Personal Protective Equipment

#### Eye/face Protection.

Safety glasses with side-shields. If splashes are likely to occur, wear goggles

#### Skin and Body Protection

Long sleeved clothing. Protective gloves if desired. Special protective equipment is generally not required.

#### Respiratory Protection

In case of mist, spray or aerosol exposure wear suitable personal respiratory protection.



## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Clear Colorless

### Physical State

Viscous liquid

### Odor

Odorless

### Odor Threshold

No information available

### pH

approx 7

### Flash Point

99 °C / 210 °F (Cleveland Open cup)

### Autoignition Temperature

371 °C / 700 °F

### Boiling point

Approx. 188 °C / 370 °F (760 torr)

### Melting/Freezing Point

Approx. -60 °C / -76 °F

### Decomposition temperature

No information available

### Oxidizing Properties

No information available

### Flammability Limits in Air

Upper: 12.6 Lower: 2.6  
(25°C, 760 mmHg)

### Molecular Weight

76.09 g/mol

### Water Solubility

Miscible

### Solubility(ies)

Soluble in: essential oils. Miscible with: Acetone and chloroform.

Immiscible with fixed oils.

### Evaporation Rate

< 0.01 [Butyl acetate = 1.0]

### Vapor Pressure

0.08 mmHg at 20 °C

### Vapor Density

2.6 (Air = 1.0)

### Specific Gravity / Relative Density

1.04 20°C (H<sub>2</sub>O = 1)

### Partition Coefficient (n-octanol/water)

No information available

## 10. STABILITY AND REACTIVITY

**Stability** Stable under normal conditions.

**Possibility of Hazardous Reactions** Hazardous polymerization does not occur.

**Conditions to Avoid** Extremes of temperature and direct sunlight.

**Incompatible Materials** No materials to be especially mentioned.

**Hazardous Decomposition Products** Thermal decomposition can lead to release of irritating gases and vapors. Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

## 11. TOXICOLOGICAL INFORMATION

### Information on toxicological effects

<b>Acute toxicity</b>	Based on available data, the classification criteria are not met.			
<b>Chemical Name</b>	<b>Weight %</b>	<b>LD50 Oral</b>	<b>LD50 Dermal</b>	<b>LC50 Inhalation</b>
1,2-Propylene glycol	99.5	20000 mg/kg Rat	20800 mg/kg Rabbit	>317042mg/m <sup>3</sup> air (Rabbit)
<b>Skin corrosion/irritation</b>	Based on available data, the classification criteria are not met.			
<b>Serious eye damage/eye irritation</b>	Based on available data, the classification criteria are not met.			
<b>Respiratory or skin sensitisation</b>	Based on available data, the classification criteria are not met.			
<b>Germ cell mutagenicity</b>	Based on available data, the classification criteria are not met.			
<b>Carcinogenicity</b>	Based on available data, the classification criteria are not met.			
<b>Reproductive toxicity</b>	Based on available data, the classification criteria are not met.			
<b>STOT - single exposure</b>	Based on available data, the classification criteria are not met.			
<b>STOT - repeated exposure</b>	Based on available data, the classification criteria are not met.			
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met.			

### Potential health effects

<b>Eyes</b>	Contact with eyes may cause irritation.
<b>Skin</b>	May cause slight skin irritation. Repeated exposure may cause skin dryness or cracking. Contact with product at elevated temperatures can result in thermal burns.
<b>Inhalation</b>	Avoid breathing vapors or mists. Inhalation of aerosol may cause irritation to respiratory tract.
<b>Ingestion</b>	Health injuries are not known or expected under normal use. May be harmful if swallowed. (dependent on amounts)

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Component Information:.

Chemical Name	Fresh Water Algae	Acute Fish Toxicity	Daphnia (Water flea)	Effects on micro-organisms	Other
1,2-Propylene glycol	EC50: 96h 19000 mg/L (Pseudokirchneriella subcapitata)	LC50: 96h 40613mg/L (Oncorhynchus mykiss) static	EC50: 48h 1000 mg/L (Daphnia magna) EC50: 24h 10000 mg/L (Daphnia magna)	NOEC >20000mg/l Pseudomonas putida	Saltwater algae Skeletonema costatum EC50: 96h 19100mg/L

Chemical Name	log Kow	BCF
1,2-Propylene glycol	-1.07	

**Persistence/Degradability** Readily biodegradable.

**Mobility** Miscible with water.

## 13. DISPOSAL CONSIDERATIONS

Whenever possible, as rules and regulations allow, please recycle or manage materials to minimize waste.

**Waste Disposal Methods** Dispose of in compliance with the laws and regulations pertaining to this product in your jurisdiction.

**Contaminated Packaging** Empty containers should be decontaminated and taken for local recycling, recovery or waste disposal.

<b>14. TRANSPORT INFORMATION</b>
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**Domestic transport regulations (USA)**

**DOT** Not regulated

**Domestic transport regulations (Canada)**

**TDG** Not regulated

**Domestic transport regulations (Mexico)**

**MEX** Not regulated

**International transport regulations**

**ICAO** Not regulated

**IATA** Not regulated

**IMDG/IMO** Not regulated

## 15. REGULATORY INFORMATION

**International Inventories**

The components of this product are reported in the following inventories:

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	AICS	ENCS ISHL	CHINA	PICCS	KECL	NZIoC
1,2-Propylene glycol	Yes	Yes	No	Yes 200-338-0	No	Yes	Yes (2)-234	Yes	Yes	Yes KE-29267	Yes

**USA****Federal Regulations****Ozone Depleting Substances:**

No Class I or Class II material is known to be used in the manufacture of, or contained in, this product.

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product is not known to contain any chemicals which are subject to the reporting requirements of the Act or regulations contained in 40 CFR 372.

**CERCLA/SARA 103-302**

Sections 103-302 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product is not known to contain any chemicals which are subject to the reporting requirements of the Act or regulations contained in 40 CFR 103-302.

**SARA 311/312 Hazardous Categorization**

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 63)**

This product is not known to contain any HAPS.

**State Regulations****California Proposition 65**

This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins under California Proposition 65 at levels which would require a warning under the statute.

**State Right-to-Know**

Component Information.

Chemical Name	Weight %	Massachusetts	Minnesota	New Jersey	Pennsylvania
1,2-Propylene glycol	99.5	No	No	Yes 3595	Yes

**Canada****WHMIS Product Classification**

Not a WHMIS controlled product.

**WHMIS Ingredient Disclosure List IDL**

Component Information

Chemical Name	Weight %	WHMIS IDL	WHMIS Threshold limits
1,2-Propylene glycol	99.5	Listed	1%

**(NPRI) Canadian National Pollutant Release Inventory**

Component Information

Chemical Name	Weight %	NPRI
1,2-Propylene glycol	99.5	Part 4 Substance as set out in Section 65 of the List of Toxic Substances in Schedule 1 of the Canadian Environmental Protection Act, 1999

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

**Mexico**

Mexico - Grade

Slight risk, Grade 1

## 16. OTHER INFORMATION

**Prepared By:** ADM Evolution Chemicals  
**Original Preparation Date:** 01-Mar-2010  
**Revision Date:** 24-Mar-2015  
**Revision Number:** 2  
**Reason for revision:** New SDS format. This version replaces all previous versions.

### Abbreviations and acronyms

ACGIH TLV - American Conference of Governmental Industrial Hygienists Threshold Limit Values  
AICS - Australian Inventory of Chemical Substances (Australia)  
A3 - Animal Carcinogen  
CAS - Chemical Abstract Service  
CHINA - Chinese Inventory of Existing Chemical Substances (China)  
DOT - U.S. Department of Transportation  
DSL - Domestic Substance List (Canada)  
EC50 - Half maximal effective concentration  
EINECS - European Inventory of Existing Commercial Chemical Substances (EU)  
ELINCS - European List of Notified Chemical Substances (EU)  
ENCS - Existing and New Chemical Substances (Japan) / ISHL - Industrial Health and Safety Law (Japan)  
GHS - Globally Harmonized System of Classification and Labelling of Chemicals  
Group 1 - Carcinogenic to Humans  
IATA - International Air Transport Association Dangerous Goods Regulations  
IARC - International Agency for Research on Cancer  
ICAO - International Civil Aviation Organisation  
ICL - In Commerce List (Canada)  
IMDG - International Maritime Dangerous Goods Code  
IMO - International Maritime Organization  
KECL - Korean Existing and Evaluated Chemical Substances (Korea)  
LC50 - Lethal concentration that produces fatalities in 50% of a given test population  
LD50 - Median lethal dose of a given test population  
MEX - NOM-002-SCT/2003 List of Hazardous Substances and Materials Most Commonly Transported  
MEXICO - Mexico Occupational Exposure Limits  
NDSL - Non Domestic Substances List (Canada)  
NFPA - National Fire Protection Association  
NIOSH - National Institute of Occupational Safety and Health  
NOAEL - No Observed Adverse Effect Level  
NTP - National Toxicology Program  
NZIoC - New Zealand Inventory of Chemicals (New Zealand)  
OECD - Organisation for Economic Co-operation and Development  
OSHA - Occupational Safety & Health Administration  
OSHA PEL - Occupational Safety and Health Administration Permissible Exposure Limits  
PICCS - Inventory of Chemicals and Chemical Substances (Philippines)  
PNEC - Predicted No-Effect Concentration  
Present - Carcinogen or potential carcinogen to be identified under OSHA's Hazard Communication Standard  
STOT - Specific Target Organ Toxicity  
TDG - Transportation of Dangerous Goods (Transport Canada)  
TSCA - Toxic Substances Control Act, Section 8(b) Inventory (USA)  
TWA - Time Weighted Average: Average concentration that should not be exceeded during a work day (usually 8-hours)  
vPvB - Very Persistent and Very Bioaccumulative  
WHMIS - Workplace Hazardous Materials Information System

**The information provided on this (M)SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.**

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