

# Safety Data Sheet

Original Preparation Date: 01-Mar-2010 Revision Date: 19-Feb-2018 Revision Number: 2

## 1. Identification

**Product Name:** 

USP-NF/FCC Propylene Glycol (Excipient/Food Use Only)

Use of the Substance / Preparation:

Excipient.

Level 7 Chemical 255 Sturgis Rd Conway, AR 72034 (855) 927-1777 Emergency response telephone number:

Chemtrec 1-800-424-9300

# 2. Hazard(s) identification

## **Emergency Overview**

Health injuries are not known or expected under normal use.

AppearancePhysical StateOdorClear ColorlessViscous liquidOdorless

This product is NOT classified as hazardous according to the criteria contained in the Hazard Communication Standard 29 CFR 1910.1200 (known as HCS 2012) or the Hazardous Products Regulations SOR/2015-17 (known as WHMIS 2015).

## 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 Substance Hazard Class
1,2-Propylene glycol	57-55-6	99.5	None known
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.

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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 (CO2) 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 (CO2).

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. No information available.

# Sensitivity to static discharge

# 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.

#### **Biological Limit Values**

No biological limit values have been listed for the component(s) of this product.

**Appropriate Engineering Controls** Ensure adequate ventilation, especially in confined areas.

Handle in accordance with good industrial hygiene and safety practice. When using, do not **General Hygiene Considerations** 

eat, drink or smoke.

Personal Protective Equipment

Safety glasses with side-shields. If splashes are likely to occur, wear goggles Eye/face Protection. **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.



# Physical and chemical properties

Clear Colorless **Appearance Physical State** Viscous liquid Odorless Odor

**Odor Threshold** No information available

Approx. 7 Ha

99 °C / 210 °F (Cleveland Open cup) **Flash Point** 

**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)

76.09 g/mol **Molecular Weight** 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**  $1.04\ 20^{\circ}C\ (H_2O=1)$ 

**Partition Coefficient** -1.07

(n-octanol/water)

# 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 (CO2).

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# 11. Toxicological information

# Information on toxicological effects

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

Potential health effects

**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).

# 12. Ecological information

#### **Ecotoxicity**

Component Information:

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

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

Persistence/Degradability Mobility PBT and vPvB assessment Other adverse effects Readily biodegradable Miscible with water. No information available. Nothing specific known.

# 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.

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# 14. Transport information

# **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	ICL	EINECS	ELINCS	AICS
1,2-Propylene glycol	Yes	Yes	No	No	Yes 200-338-0	No	Yes

Chemical Name	ENCS ISHL	CHINA	PICCS	KECL	Taiwan	Turkey	NZIoC
1,2-Propylene glycol	Yes (2)-234	Yes	Yes	Yes KE-29267	Yes	Yes 200-338-0	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

Refer to the OSHA hazard classification(s) provided in section 2 of this SDS.

#### 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.

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

# Canada

## (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

# 16. Other information

**Original Preparation Date:** 01-Mar-2010 **Revision Date:** 19-Feb-2018

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**Reason for revision:** New product name. This version replaces all previous versions.

## Abbreviations and acronyms

A1 - Known Human Carcinogen

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

A4 - Not classifiable as a human carcinogen

ACGIH TLV - American Conference of Governmental Industrial Hygienists Threshold Limit Values

CAS - Chemical Abstract Service

Ceiling - Ceiling Limit Value: Concentrations that should never be exceeded at any given time (instantaneous)

CHINA - Chinese Inventory of Existing Chemical Substances (China)

CLP - Classification, Labelling and Packaging, Regulation (EC)1272/2008

CSA - Chemical Safety Assessment

CSR - Chemical Safety Report

Delisted - Substances Delisted from Report on Carcinogens

DNEL - Derived No Effect Level

DOT - U.S. Department of Transportation

DSL - Domestic Substance List (Canada)

EC - European Commission

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EC No. - European Community number

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)

EPCRA - Emergency Planning and Community Right-to-Know Act of 1986 (USA)

FOSFA - The Federation of Oils, Seeds and Fats Associations

GHS - Globally Harmonized System of Classification and Labelling of Chemicals

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

Group 3 - Not Classifiable

IARC - International Agency for Research on Cancer

IATA - International Air Transport Association Dangerous Goods Regulations

IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk

ICAO - International Civil Aviation Organisation

ICL - In Commerce List (Canada)

IDLH - Immediately Dangerous to Life or Health

IMDG - International Maritime Dangerous Goods Code

IMO - International Maritime Organization

IUB - International Union of Biochemistry and Molecular Biology

KECL - Korean Existing and Evaluated Chemical Substances (Korea)

Known - Known Carcinogen

LC50 - Lethal concentration that produces fatalities in 50% of a given test population

LD50 - Median lethal dose of a given test population

Marpol - International Convention for the Prevention of Pollution From Ships

MEPC - Marine Environment Protection Committee

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

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

SEN - Sensitizer notation. May reflect risk of dermal and/or inhalation sensitization (consult ACGIH documentation).

Skin notation - Potential for cutaneous absorbtion

STEL - Short Term Exposure Limit: Concentrations that should not be exceeded except for short periods of time ( usually 15-minutes)

STOT - Specific Target Organ Toxicity

STV - Short Term Value (same as STEL)

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)

Under Consideration - Under Consideration by the National Toxicology Program

vPvB - Very Persistent and Very Bioaccumulative

WHMIS - Workplace Hazardous Materials Information System

The information provided on this 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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