

## SAFETY DATA SHEET

**Product Name.** 1,2-Propylene glycol

Version: US001

SDS Number: 001

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Revision Date: 27/03/2019

Print Date: 27/03/2019

Language: EN

### 1 Identification of the substance/mixture and of the company/undertaking

**Product Name:** 1,2-Propylene glycol

**CAS-No.:** 57-55-6

**Recommended Use** Laboratory chemicals.

**Uses advised against** Not for food, drug, pesticide or biocidal product use

**Supplier:** Sinova Specialties Ltd.

**Emergency call(24h):** +86-10-58761839

+ 1-704-807-3411;

**Fax:** +86-10-59037396;

**Email:** ellenliu@sinovachem.net

### 2 Hazards identification

#### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

**Skin Corrosion/irritation Category 2**

**Serious Eye Damage/Eye Irritation Category 2**

**Specific target organ toxicity (single exposure) Category 3**

**Target Organs - Central nervous system (CNS).**



#### Label Elements

#### Signal Word Warning

#### Hazard Statements

Causes skin irritation

Causes eye irritation

May cause drowsiness or dizziness

#### Precautionary Statements

#### Prevention

Do not breathe dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

#### Response

Get medical attention/advice if you feel unwell

#### Inhalation

**IF INHALED:** Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

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### Storage

Store in a well-ventilated place. Keep container tightly closed

Store locked up

### Disposal

Dispose of contents/container to an approved waste disposal plant

### Hazards not otherwise classified (HNOC)

None identified

## 3 Composition/information on ingredients

### Substances

Chemical name	CAS number	%
1,2-Propylene glycol	57-55-6	>99.5

## 4 First aid measures

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

If

symptoms persist, call a physician.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if

symptoms occur.

**Inhalation** Move to fresh air. Get medical attention immediately if symptoms occur. If not breathing, give artificial respiration.

**Ingestion** Do not induce vomiting. Get medical attention immediately if symptoms occur.

### Most important symptoms and effects

Breathing difficulties. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

**Notes to Physician** Treat symptomatically

## 5 Firefighting measures

**Suitable Extinguishing Media** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Unsuitable Extinguishing Media** No information available

**Flash Point** 99 °C / 210.2 °F

**Method** - No information available

**Autoignition Temperature** 400 °C / 752 °F

### Explosion Limits

**Upper** 12.6 vol %

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**Lower 2.6 vol %**

**Sensitivity to Mechanical Impact** No information available

**Sensitivity to Static Discharge** No information available

### Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition. Thermal decomposition can lead to release of irritating gases and vapors.

### Hazardous Combustion Products

Carbon monoxide (CO) Carbon dioxide (CO<sub>2</sub>)

### 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	Flammability	Instability	Physical hazards
2	1	1	N/A

### 6 Accidental release measures

**Personal Precautions** Use personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.

**Environmental Precautions** Should not be released into the environment. See Section 12 for additional ecological information.

### Methods for Containment and Clean Up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

### 7 Handling and storage

**Handling** Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Do not breathe vapors or spray mist. Wear personal protective equipment.

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition.

### 8 Exposure controls/personal protection

#### Exposure Guidelines

**Engineering Measures** Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Personal Protective Equipment

**Eye/face Protection** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

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**Skin and body protection** Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

### 9 Physical and chemical properties

**Physical State** Viscous liquid

**Appearance** Clear Colourless

**Odor** Odorless

**Odor Threshold** No information available

**pH** 6.5-7.5 100g/l aq. sol

**Melting Point/Range** -60 °C / -76 °F

**Boiling Point/Range** 187 °C / 368.6 °F

**Flash Point** 99 °C / 210.2 °F

**Evaporation Rate** No information available

**Flammability (solid,gas)** Not applicable

**Flammability or explosive limits**

**Upper** 12.6 vol %

**Lower** 2.6 vol %

**Vapor Pressure** 0.13 mbar @ 20 °C

**Vapor Density** 2.62 (Air = 1.0)

**Specific Gravity** 1.03 - 1.04

**Solubility** Soluble in water

**Partition coefficient; n-octanol/water** No data available

**Autolgnition Temperature** 400 °C / 752 °F

**Decomposition Temperature** No information available

**Viscosity** 45 mPa.s at 20 °C

**Molecular Formula** C3 H8 O2

**Molecular Weight** 76.10

### 10 Stability and reactivity

**Reactive Hazard** None known, based on information available

**Stability** Hygroscopic.

**Conditions to Avoid** Incompatible products. Excess heat. Exposure to moist air or water.

**Incompatible Materials** Strong oxidizing agents, Acids

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**Hazardous Decomposition Products** Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>)

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

### 11 Toxicological information

#### Acute Toxicity

#### Product Information

#### Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
1,2-Propylene glycol	LD50 = 20 g/kg ( Rat )	LD50 = 20800 mg/kg ( Rabbit )	Not listed

#### Toxicologically Synergistic Products

No information available

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Irritation** Irritating to eyes and skin

**Sensitization** No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
1,2-Propylene glycol	57-55-6	Not listed				

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** Central nervous system (CNS)

**STOT - repeated exposure** None known

**Aspiration hazard** No information available

**Symptoms / effects, both acute and delayed**

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated.

### 12 Ecological information

#### Ecotoxicity.

Component	Freshwater Algae	Freshwater Fish	Microtox	Microtox

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1,2-Propylene glycol	EC50: = 19000 mg/L, 96h (Pseudokirchneriella subcapitata)	LC50: = 710 mg/L, 96h (Pimephales promelas)	= 710 mg/L EC50 Photobacterium phosphoreum 30 min	EC50: > 10000 mg/L, 24h (Daphnia magna)
		LC50: 41 - 47 mL/L, 96h static (Oncorhynchus mykiss)		EC50: > 1000 mg/L, 48h Static (Daphnia magna)
		LC50: = 51600 mg/L, 96h static (Oncorhynchus mykiss)		
		LC50: = 51400 mg/L, 96h static (Pimephales promelas)		

**Persistence and Degradability** Miscible with water Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Will likely be mobile in the environment due to its water solubility.

Component	log Pow
1,2-Propylene glycol	-0.9

### 13 Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

### 14 Transport information

**DOT** Not regulated

**TDG** Not regulated

**IATA** Not regulated

**IMDG/IMO** Not regulated

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### 15 Regulatory information

All of the components in the product are on the following inventory lists: X = listed  
International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
1,2-Propylene glycol	X	X	-	200-338-0	-		X	X	X	X	X

#### Legend:

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated

polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commended PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base

Production and Site Reports (40 CFR 710(B)).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

#### U.S. Federal Regulations

**TSCA 12(b)** Not applicable

**SARA 313** Not applicable

**SARA 311/312 Hazard Categories** See section 2 for more information

**CWA (Clean Water Act)** Not applicable

**Clean Air Act** Not applicable

**OSHA Occupational Safety and Health Administration**

Not applicable

**CERCLA** Not applicable

**California Proposition 65** This product does not contain any Proposition 65 chemicals

#### U.S. State Right-to-Know Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
1,2-Propylene glycol	-	X	X	-	X

#### U.S. Department of Transportation

Reportable Quantity (RQ): N

DOT Marine Pollutant N

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**DOT Severe Marine Pollutant N**

**U.S. Department of Homeland Security**

This product does not contain any DHS chemicals.

**Other International Regulations**

**Mexico - Grade** Slight risk, Grade 1

### 16 Other Information

#### Disclaimer

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text