

Glycol Ether DPNB

SECTION 1. IDENTIFICATION

Product Identifier Glycol Ether DPNB

Other Means of Identification

1-(2-Butoxy-1-methylethoxy)-2-propanol, Dipropylene Glycol n-Butyl Ether

Product Code(s) GL5195

Product Family Organic Solvent

Recommended Use Industrial.

Restrictions on Use None known.

Supplier Identifier Alphachem Limited, 2485 Milltower Court, Mississauga, Ontario, L5N 5Z6, (905) 821-2995

Emergency Phone No. Infotrac, 1-800-535-5053, 24 Hours

SDS No. 1057

SECTION 2. HAZARD IDENTIFICATION

Classification

Not classified under any hazard class.

Label Elements

Not applicable

Other Hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

Chemical Name	CAS No.	%	Other Identifiers	Other Names
2-Propanol, 1-(2-butoxy-1-methylethoxy)-	29911-28-2	> 98.5	1-(2-Butoxy-1- methylethoxy)-2- propanol	DOWANOL

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Remove source of exposure or move to fresh air. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by Poison Centre or doctor. Get immediate medical advice or attention.

Skin Contact

Immediately rinse skin with lukewarm, gently flowing water for at least 30 minutes. Immediately call a Poison Centre or doctor.

Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for at least 30 minutes, while

Product Identifier: Glycol Ether DPNB - Ver. 1

Date of Preparation: August 02, 2017

Date of Last Revision: August 02, 2017 Page 01 of 06

holding the eyelid(s) open. If eye irritation persists, get medical advice or attention.

Ingestion

Rinse mouth with water. Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Immediately call a Poison Centre or doctor.

First-aid Comments

Consult a doctor and/or the nearest Poison Control Centre for all exposures except minor instances of inhalation or skin contact.

All first aid procedures should be periodically reviewed by a doctor familiar with the material or its conditions of use in the workplace.

Most Important Symptoms and Effects, Acute and Delayed

None known.

Immediate Medical Attention and Special Treatment

Special Instructions

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog. Special "alcohol resistant fire-fighting foams".

Unsuitable Extinguishing Media

Do not use a solid (straight) water stream as it may scatter and spread fire.

Specific Hazards Arising from the Product

Can ignite if strongly heated. Heating increases the release of toxic vapour. Closed containers may rupture violently when heated releasing contents.

In a fire, the following hazardous materials may be generated: very toxic carbon monoxide, carbon dioxide.

Special Protective Equipment and Precautions for Fire-fighters

Fight fire from a safe distance or a protected location. Approach fire from upwind to avoid hazardous vapours or gases. Knock down vapours or gases with water fog or fine water spray. Move containers from fire area if it can be done without risk. Otherwise, use water in flooding quantities as a spray or fog to keep fire-exposed containers cool and absorb heat. For a massive fire, immediately evacuate the area and use unmanned hose holder or monitor nozzles. Dike and recover contaminated water for appropriate disposal. Immediately withdraw from the area in case of rising sound from venting safety device or discoloration of the container.

Chemical protective clothing (e.g. chemical splash suit) and positive pressure SCBA may be necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Use the personal protective equipment recommended in Section 8 of this safety data sheet. Increase ventilation to area or move leaking container to a well-ventilated and secure area. Eliminate all ignition sources. Use grounded, explosion-proof equipment. Remove or isolate incompatible materials as well as other hazardous materials.

Environmental Precautions

Do not allow into any sewer, on the ground or into any waterway. If the spill is inside a building, prevent product from entering drains, ventilation systems and confined areas.

Methods and Materials for Containment and Cleaning Up

Contain and soak up spill with absorbent that does not react with spilled product. Eg.: dry sand/earth/vermiculite place used absorbent into suitable, covered, labelled containers for disposal.

SECTION 7. HANDLING AND STORAGE

Product Identifier: Glycol Ether DPNB - Ver. 1

Date of Preparation: August 02, 2017

Date of Last Revision: August 02, 2017 Page 02 of 06

Precautions for Safe Handling

Wear personal protective equipment to avoid direct contact with this chemical. Only use where there is adequate ventilation. Prevent accidental contact with incompatible chemicals. Do not weld, cut or perform hot work on empty container until all traces of product have been removed. Keep containers tightly closed when not in use or empty.

Conditions for Safe Storage

Store in an area that is: cool, dry, out of direct sunlight and away from heat and ignition sources. Store in following materials: Carbon steel, Stainless steel, Phenolic lined steel drums. Do not store in: Aluminum, Copper, Galvanized iron. Galvanized steel. Storage period: Bulk - 6 months, Steel drums - 24 months.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

	ACGIH TLV®		OSHA PEL		AIHA WEEL	
Chemical Name	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
2-Propanol,	Not		Not			
1-(2-butoxy-1-methylethoxy)-	established		established			

Appropriate Engineering Controls

Use local exhaust ventilation and enclosure, if necessary, to control amount in the air.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles and face shield when contact is possible.

Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.

Suitable materials are: butyl rubber, natural rubber, neoprene rubber, nitrile rubber, polyvinyl chloride.

Respiratory Protection

Wear a NIOSH approved air-purifying respirator with an appropriate cartridge.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance Clear colourless liquid.

Odour Ethereal **Odour Threshold** Not available Ha Not available

Melting Point/Freezing Point < -75 °C (-103 °F) (melting); < -75 °C (-103 °F) (freezing)

Initial Boiling Point/Range 230 °C (446 °F)

Flash Point 100 °C (212 °F) (closed cup) **Evaporation Rate** 0.006 (n-butyl acetate = 1)

Flammability (solid, gas) Not applicable

Upper/Lower Flammability or

Explosive Limit

20.4% (upper); 0.6% (lower)

Vapour Pressure 0.068 mm Hg (0.009 kPa) at 25 °C

Vapour Density (air = 1) 6.6

Relative Density (water = 1) 0.911 at 25 °C

Solubility Moderately soluble (1-10%) in water; Soluble in all proportions in common

organic solvents.

Partition Coefficient, 1.523 (estimated)

n-Octanol/Water (Log Kow)

Auto-ignition Temperature 194 °C (381 °F)

Product Identifier: Glycol Ether DPNB - Ver. 1

Date of Preparation: August 02, 2017

Date of Last Revision: August 02, 2017 Page 03 of 06 **Decomposition Temperature** Not available

Viscosity 4.9 mm2/s at 25 °C (kinematic); Not available (dynamic)

Other Information

Physical State Liquid Molecular Weight 190

SECTION 10. STABILITY AND REACTIVITY

Reactivity

None known.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

Hazardous polymerization does not occur.

Conditions to Avoid

High temperatures.

Incompatible Materials

Strong acids (e.g. hydrochloric acid), strong bases (e.g. sodium hydroxide), strong oxidizing agents (e.g. perchloric acid).

Hazardous Decomposition Products

Very toxic, flammable aldehydes; ketones. organic acids.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Inhalation; skin contact; eye contact; ingestion.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
2-Propanol, 1-(2-butoxy-1-methylethoxy)-	> 2.04 mg/L (rat) (4-hour exposure)	3700 mg/kg (rat)	> 2000 mg/kg (rat)

Skin Corrosion/Irritation

Animal tests show very mild irritation.

Serious Eye Damage/Irritation

Animal tests show very mild irritation.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

Not harmful based on available information.

Ingestion

No information was located.

Aspiration Hazard

Not known to be an aspiration hazard.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

No information was located.

Respiratory and/or Skin Sensitization

Not known to be a skin sensitizer. No information was located for respiratory sensitization.

Carcinogenicity

Product Identifier: Glycol Ether DPNB - Ver. 1

Date of Preparation: August 02, 2017

Date of Last Revision: August 02, 2017 Page 04 of 06

Chemical Name	IARC	ACGIH®	NTP	OSHA
2-Propanol,	Not Listed	Not designated	Not Listed	Not Listed
1-(2-butoxy-1-methylethoxy)-				

Reproductive Toxicity

Development of Offspring

Not known to harm the unborn child.

Sexual Function and Fertility

Not known to cause effects on sexual function or fertility.

Effects on or via Lactation

No information was located.

Germ Cell Mutagenicity

Not known to be a mutagen.

Interactive Effects

No information was located.

SECTION 12. ECOLOGICAL INFORMATION

This section is not required by WHMIS. This section is not required by OSHA HCS 2012.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Bury in a licensed landfill or burn in an approved incinerator according to federal, provincial/state, and local regulations.

SECTION 14. TRANSPORT INFORMATION

Not regulated under Canadian TDG regulations. Not regulated under US DOT Regulations.

Special Precautions Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

Canada

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

Listed on the DSL.

USA

Toxic Substances Control Act (TSCA) Section 8(b)

Listed on the TSCA Inventory.

SECTION 16. OTHER INFORMATION

SDS Prepared By Alphachem Limited Phone No. (905)-821-2995

Date of Preparation August 02, 2017

Date of Last Revision August 02, 2017

ReferencesCHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS). **Disclaimer**This document is offered only as a guide in the safe handling of the above product, and has

Product Identifier: Glycol Ether DPNB - Ver. 1

Date of Preparation: August 02, 2017

Date of Last Revision: August 02, 2017 Page 05 of 06

been prepared from the best information currently available. It is not intended to be all-inclusive and the conditions of use may involve other additional considerations. Since Alphachem Limited cannot anticipate or control the conditions under which the product may be used, it will not be liable for any claims, damages or losses which may result from the use or reliance on any information herein.

Product Identifier: Glycol Ether DPNB - Ver. 1

Date of Preparation: August 02, 2017
Date of Last Revision: August 02, 2017