



## Material Safety Data Sheet

### 1. Product and Company Identification

<b>Product Name :</b>	Propylene glycol monobutyl ether; PNB
<b>Synonyms:</b>	Propylene glycol n-butyl ether; Propylene glycol butyl ether; Propanediol butyl ether
<b>Cas No.:</b>	5131-66-8
<b>Supplier:</b>	Yueyang Changde New Materials Co., Ltd.
<b>Address:</b>	Changling Area, Hunan Yueyang Green Chemical High-Tech Industrial Development Zone, Yunxi Street, Yunxi District, Yueyang City, Hunan Province, P.R.China
<b>Telephone :</b>	86-730-8503612
<b>Zip Code:</b>	414000
<b>Applications:</b>	<p>Industrial solvent for cleaner and coating formulations.</p> <ul style="list-style-type: none"><li>• Coupling agent and solvent in household and industrial cleaners, grease and paint removers, metal cleaners, and hard surface cleaners.</li><li>• Effective coupling agent and efficient solvent for water-reducible coatings.</li><li>• Effective coalescent for lowering minimum film formation temperature (MFFT) in water-borne latex coatings.</li><li>• Active solvent for solvent-based coatings.</li><li>• Chemical intermediate for the production of epoxides, acid ester derivatives, solvents, and plasticizers.</li><li>• Effective coupling agent in waterbased agricultural formulations</li></ul>

### 2.Composition/Information on Ingredients

Component	Concentration	CAS NO.
Propylene glycol monobutyl ether	≥99.0% (weight percent)	5131-66-8

### 3. Hazards identification

#### Emergency Overview

<b>Appearance</b>	Liquid
<b>Color</b>	Colorless
<b>Odor</b>	Ether
Combustible liquid. May be harmful if swallowed. Causes skin irritation. Causes eye irritation.	

#### GHS Classification

Classified as hazardous according to regulatory criteria.

Flammable liquids - Category 4

Acute toxicity - Category 5 - Ora

Skin corrosion/irritation - Category 2

Serious eye damage/eye irritation - Category 2B

#### Hazard statements

Combustible liquid.  
May be harmful if swallowed.  
Causes skin and eye irritation.

#### Precautionary statements



#### Prevention

Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.  
Wash skin thoroughly after handling.  
Wear protective gloves/ eye protection/ face protection.

#### Response

IF ON SKIN: Wash with plenty of water.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Call a POISON CENTER/ doctor if you feel unwell.  
If skin irritation occurs: Get medical advice/ attention.  
If eye irritation persists: Get medical advice and/or attention.  
In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

#### Storage

Store in a well-ventilated place. Keep cool.

#### Disposal

Dispose of contents/ container to an approved waste disposal plant

<b>Physical and chemical hazards:</b>	Combustible liquid.
<b>Health hazards:</b>	May be harmful if swallowed. Causes skin irritation. Causes eye irritation.
<b>Environmental hazards:</b>	Not classified based on available information.
<b>Other hazards:</b>	No data available

### 4. First-aid measures

<b>Eye Contact:</b>	Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist. Suitable emergency eye wash facility should be available in work area.
<b>Skin Contact:</b>	Wash off with plenty of water. Suitable emergency safety shower facility should be available in work area.
<b>Inhalation:</b>	Move person to fresh air and keep comfortable for breathing; consult a physician.
<b>Ingestion:</b>	If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.
<b>Notes to physician:</b>	No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

### 5. Fire-fighting measures

<b>Specific Hazards:</b>	Combustible in case of flame and high heat. It can react with oxidant. In case of high heat, the internal pressure of the container will increase, which may lead to cracking and explosion.
<b>Hazardous combustion products:</b>	Carbon monoxide; Carbon dioxide.



<b>Suitable extinguishing media:</b>	Water fog or fine spray.. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Alcohol resistant foams (ATC type) are preferred.General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective..
<b>Fire-fighting advice:</b>	Firefighters must wear gas masks and full-body fire suits to extinguish fires in the upwind direction. Move the container from the fire site to the open place as much as possible. Spray water to keep the fire container cool until the fire fighting is over. If the container in the fire scene has changed color or produced sound from the safety pressure relief device, it must be evacuated immediately. Extinguishing agent: water fog, foam, dry powder, carbon dioxide and sand.

## 6. Accidental release measures

### Emergency Procedures:

Isolate area.

Refer to section 7, Handling, for additional precautionary measures.

Keep unnecessary and unprotected personnel from entering the area. No smoking in area. Keep personnel out of low areas. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

### Environmental precautions:

Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.

### Methods and materials for containment and cleaning up:

Small spills: Absorb with materials such as: Sand. Vermiculite. Collect in suitable and properly labeled containers.

Large spills: Contain spilled material if possible. Pump into suitable and properly labeled containers.

## 7. Handling and storage

<b>Precautions for safe handling:</b>	Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Containers, even those that have been emptied, can contain vapors. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers. Keep away from heat, sparks and flame. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION. Spills of these organic materials on hot fibrous insulations may lead to lowering of the autoignition temperatures possibly resulting in spontaneous combustion.
<b>Conditions for safe storage:</b>	Store in the following material(s): Carbon steel. Stainless steel. Phenolic lined steel drums. Do not store in: Aluminum. Copper. Galvanized iron. Galvanized steel. See Section 10 for more specific information.

## 8. Exposure Controls/Personal Protection

<b>Occupational Exposure Limits:</b>	No data information.
<b>Engineering Control Measures:</b>	Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.
<b>Individual protection measures:</b>	
<b>Eye/face protection:</b>	Use chemical goggles. If exposure causes eye discomfort, use a fullface respirator.



<b>Hand protection:</b>	Use gloves chemically resistant to this material. Such as: Butyl rubber gloves; Neoprene gloves; Nitrile/butadiene rubber gloves.
<b>Skin protection:</b>	Use protective clothing chemically resistant to this material.
<b>Other protection:</b>	Wash hands. Take a shower after finished work. Keep good health habit.

## 9. Physical and chemical properties

<b>Physical state:</b>	Colorless, low volatile liquid with a slight bitter taste
<b>Odour:</b>	Mild
<b>Melting Point (°C)</b>	No data information
<b>Boiling Point(°C):</b>	169-172
<b>Relative Density (Water=1):</b>	0.878
<b>Relative Vapour Density (air=1):</b>	No data information
<b>Saturated Vapor Pressure (kpa):</b>	0.16 (25°C)
<b>Combustion Heat(KJ/mol):</b>	No data information
<b>Critical Temperature (°C):</b>	No data information
<b>Critical Pressure (MPa):</b>	No data information
<b>Octanol/Water Partition Coefficient:</b>	No data information
<b>Flash Point (°C):</b>	71
<b>Autoignition Temperature (°C):</b>	No data information
<b>Upper Explosive Limits % (V/V):</b>	No data information
<b>Lower Explosive Limits % (V/V):</b>	No data information
<b>Solubility:</b>	Dissolved 6.0% in water at 25°C; Water dissolved 1.5% in propylene glycol butyl ether
<b>Main Application:</b>	Used in organic synthesis, or as a solvent.

## 10. Stability and reactivity

<b>Chemical Stability:</b>	Stable under proper operation and storage conditions.
<b>Possibility of Hazardous Reactions:</b>	Polymerization will not when used as directed.
<b>Storage Conditions:</b>	Avoid direct light, high temperature, flame, spark and other sources of combustion.
<b>Incompatible Materials:</b>	Avoid contact with: Strong acids. Strong bases. Strong oxidizers.
<b>Hazardous Decomposition products</b>	No hazardous decomposition products will be produced when stored and operated correctly

## 11. Toxicological information

<b>Toxicological Data:</b>	
<b>Acute toxicity :</b>	Oral LD50:5950mg/ kg (rat); Dermal LD50:1590mg/ kg (rabbit); LC50: No information
<b>Irritation:</b>	Rabbit eyes contact: 500mg, causes eye irritation



## 12. Ecotoxicological information

Be harmful to the environment, avoid contaminating waterways.

## 13. Disposal considerations

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER.

Incineration is recommended for disposal. Reuse containers where they can be used or bury them in specified places.

## 14. Transport information

**UN Number :** No information

**Packing Lable:** No need

**Packing Method:** No information

**Road and Rail Transport** Not regulated for transport

**Marine Transport** Not regulated for transport

**Air Transport** Not regulated for transport

## 15. Regulatory information

The Work Safety Law of the People's Republic of China (adopted by the 13th National People's Congress Standing Committee on June 10, 2021) Adopted at the 29th meeting), Law of the People's Republic of China on the Prevention and Control of Occupational Diseases (the 13th National Congress on December 29, 2018 Revised at the 7th Meeting of the Standing Committee of the National People's Congress), Regulations on the Safety Administration of Hazardous Chemicals (December 7, 2013 of The State Council Decree No. 645 revised) and Regulations on Production Safety License (Revised by Decree No. 653 of The State Council on July 729, 2014) Classification and name number of dangerous goods (GB 6944-2012), packaging mark of dangerous goods (GB 190-2009) Classification and labeling of chemicals (GB30000.2-2013 -- GB30000.29-2013), occupational exposure limit of hazardous factors in the workplace (GBZ 2.1-2019), Hazardous Chemicals Catalogue (2015) and other laws and regulations on the safe use of chemicals, Storage, transportation, loading and unloading, classification and marking have made corresponding provisions

## 16. Other information

**Date of issue:** Apr.13th, 2024

### Disclaimer

The information in this SDS applies only to the specified products and, unless otherwise specified, does not apply to mixtures of this product with other substances. This SDS is intended to provide information on the safety of the use of the product only to those who are properly trained to use the product. The user of this SDS must make an independent judgment of the suitability of the SDS under special conditions of use. In the event of special use, the author of this SDS shall not be liable for any injury caused by the use of this SDS