



SAFETY DATA SHEET

NEOPENTYL GLYCOL

Revision Date 24-Dec-2021

Revision Number 4

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:	Neopentyl Glycol
SYNONYMS:	NPG, 2,2-Dimethyl-1,3-propanediol
MANUFACTURER:	Nanjing Ocas International Trading Co.
ADDRESS:	Haitong Building, No.100 Qinhuai Road, Moling Street, Jiangning District, Nanjing, China
EMERGENCY PHONE:	Neopentyl Glycol
CHEMICAL NAME:	Neopentyl Glycol
CHEMICAL FAMILY:	Organic compound
CHEMICAL FORMULA:	C ₅ H ₁₂ O ₂
CAS No.:	126-30-7
PRODUCT USE:	It is mainly used in the production of alkyd resin, polyester resin, unsaturated polyester resin, polyurethane foam and synthetic lubricant as well as used in coatings and plasticizers. It can also be used as raw material for the production of polymerization inhibitor, oil additive, stabilizer and insecticide.
PREPARED BY:	Nanjing Ocas International Trading Co.

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification:	Serious eye damage (Category 1), H318
EU/ECC:	No data available
OSHA 1910.1200:	Serious eye damage (Category 1), H318

Label Elements:

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS#	EINECS #	GHS Hazard Statement Codes	%
Neopentyl Glycol	126-30-7	204-781- 0	H318	99

SECTION 4: FIRST AID MEASURES

EYES:	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
SKIN:	Rinse with soap and plenty of water. Consult a doctor.
INGESTION:	Never feed an unconscious person anything from the mouth. Rinse the mouth with water. Consult a doctor.
INHALATION:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Emergency response: Use personal protective equipment. Prevent generation of dust. Prevent inhalation of vapors, mists, or gases. Ensure ventilation. Evacuate personnel to a safe area. Avoid inhaling dust. Environmental Precautions Do not allow product to enter sewers. Methods and Materials for Containing and Removing Spills Collect and dispose of spills without generating dust. Sweep up and shovel out. Store in a suitable enclosed disposer. Provide suitable exhaust ventilation where dust is generated. General fire protection.

SECTION 5: FIRE-FIGHTING MEASURES

FLASHPOINT:	399°C
FLAMMABLE LIMITS (% VOLUME IN AIR)	
Lower Explosive Limit (LEL):	18.8
Upper Explosive Limit (UEL):	1.37
AUTOIGNITION TEMPERATURE:	399°C

EXTINGUISHING MEDIA:

Extinguish fires with water spray, alcohol-resistant foam, dry powder or carbon dioxide.

FIRE FIGHTING PROCEDURES:

Self-absorbing filtering gas masks (full face masks) must be worn when airborne concentrations are exceeded. Air respirators should be worn when rescuing or evacuating in an emergency. Wear rubberized protective clothing. Wear rubberized oil-resistant gloves. Smoking, eating and drinking are prohibited at the work site. After work, shower and change clothes. Pre-employment and periodic medical examinations

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:

In case of fire, harmful decomposition products are generated. -Carbon oxides

NFPA:	Health	2	HMIS:	Health	2
	Fire	1		Flammability	1
	Reactivity	0		Reactivity	No data available
				PPE	No data available

SECTION 6: ACCIDENTAL RELEASE MEASURES**PERSONAL PROTECTIVE EQUIPMENT:**

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. Use the personal protective equipment recommended in Section 8.

SPILL PROCEDURES:

Neopentyl Glycol is usually safe under normal conditions of use and storage, but may cause allergic reactions in some individuals.

When using Neopentyl Glycol, avoid contact with eyes, skin and clothing and make sure the room is well ventilated.

If accidentally swallowed, seek immediate medical attention or professional medical advice.

DISPOSAL:

Follow the procedures recommended in Section 13.

SECTION 7: HANDLING AND STORAGE**HANDLING:**

Avoid all personal contact, including inhalation.

Wear protective clothing when risk of exposure occurs.

Use in a well-ventilated area.

Prevent concentration in hollows and sumps.

DO NOT enter confined spaces until atmosphere has been checked.

DO NOT allow material to contact humans, exposed food or food utensils.

Avoid contact with Incompatible materials.

When handling, DO NOT eat, drink or smoke.

Keep containers securely sealed when not in use.

Avoid physical damage to containers.

Always wash hands with soap and water after handling.

Work clothes should be laundered separately. Launder contaminated clothing before re-use.

Use good occupational work practice.

Observe manufacturer's storage and handling recommendations contained within this SDS.

Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.

Organic powders when finely divided over a range of concentrations regardless of particulate size or shape and suspended in air or some other oxidizing medium may form explosive dust-air mixtures and result in a fire or dust explosion (including secondary explosions)

Minimise airborne dust and eliminate all ignition sources. Keep away from heat, hot surfaces, sparks, and flame.

Establish good housekeeping practices.

Remove dust accumulations on a regular basis by vacuuming or gentle sweeping to avoid creating dust clouds.

Use continuous suction at points of dust generation to capture and minimise the accumulation of dusts. Particular attention should be given to overhead and hidden horizontal surfaces to minimise the probability of a "secondary" explosion. According to NFPA Standard 654, dust layers 1/32 in. (0.8 mm) thick can be sufficient to warrant immediate cleaning of the area.

Do not use air hoses for cleaning.

Minimise dry sweeping to avoid generation of dust clouds. Vacuum dust-accumulating surfaces and remove to a chemical disposal area. Vacuums with explosion-proof motors should be used.

Control sources of static electricity. Dusts or their packages may accumulate static charges, and static discharge can be a source of ignition.

Solids handling systems must be designed in accordance with applicable standards (e.g. NFPA including 654 and 77) and other national guidance.

Do not empty directly into flammable solvents or in the presence of flammable vapors.

The operator, the packaging container and all equipment must be grounded with electrical bonding and grounding systems. Plastic bags and plastics cannot be grounded, and antistatic bags do not completely protect against development of static charges.

Empty containers may contain residual dust which has the potential to accumulate following spilling. Such dusts may explode in the presence of an appropriate ignition source.

Do NOT cut, drill, grind or weld such containers.

In addition ensure such activity is not performed near full, partially empty or empty containers without appropriate workplace safety authorisation or permit.

STORAGE:

Keep container tightly closed and store in a dry, well-ventilated place. Store in a cool place.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

EYE PROTECTION:

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate protection lgovernment standards such as NIOSH (US) or EN 166(EU).

SKIN PROTECTION:

Wear rubberized gas resistant clothing. Wear rubberized oil-resistant gloves. Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

RESPIRATORY PROTECTION:

When airborne concentrations are exceeded, a white suction-filtered gas mask (full face shield) must be worn. Air respirators should be worn when rescuing or evacuating in an emergency.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Crystalline solid
COLOR:	White
ODOR:	Odourless
ODOR THRESHOLD:	No data available
PH:	No data available
BOILING POINT/BOILING RANGE	208 °C
MELTING/FREEZING POINT:	126-128°C
FLASH POINT:	107 °C
EVAPORATION RATE:	No data available
FLAMMABILITY SOLID:	No data available
UPPER/LOWER EXPLOSIVE LIMITS:	Upper explosion limit: 18.8 %(V) Lower explosion limit: 1.37 %(V)
VAPOR PRESSURE:	<0.8 mm Hg (20 °C)
VAPOR DENSITY (AIR):	3.6 (vs air)
WATER SOLUBILITY:	830 g/L (20 °C)
RELATIVE DENSITY (SPECIFIC GRAVITY):	1.06
WATER SOLUBILITY:	830 g/L (20 °C)
PARTITION COEFFICIENT: n-octanol/water:	log Pow: -0.15 at 25 °C (77 °F)

AUTO IGNITION TEMPERATURE:	399°C
DECOMPOSITION TEMPERATURE :	No Data Available
VISCOSITY:	No data available
MOLECULAR FORMULA:	C ₅ H ₁₂ O ₂
MOLECULAR WEIGHT:	104.15

SECTION 10: STABILITY AND REACTIVITY

STABILITY:	Stable under recommended storage conditions.
CONDITIONS TO AVOID:	Avoid moisture
INCOMPATIBLE MATERIALS:	Strong oxidizing agents, Acid chlorides, Acid anhydrides
HAZARDOUS DECOMPOSITION PRODUCTS:	Other decomposition products. no data available

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICITY DATA:	Acute toxicity: LD ₅₀ : ≥6400mg/kg orally; The transoral LD ₅₀ of mice ranged from 3200 to 6400mg/kg LC ₅₀ : No data available
CARCINOGENICITY:	IARC: Nothing in this product is greater than or equal to 0. 1% of the components have been identified by IARC as probable or certain human carcinogens.
REPRODUCTIVE EFFECTS:	no data available
MUTAGENICITY:	Ames test S. typhimurium Result: negative
TERATOGENICITY:	no data available

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY:

Toxicity to fish: static test LC₅₀ - *Oryzias latipes*- > 10,000 mg/l - 48 h

Toxicity to daphnia and other aquatic invertebrates: static test EC₅₀ - *Daphnia magna* (Water flea) - > 500 mg/l - 48 h

Toxicity to algae: static test EC₅₀ - *Desmodesmus subspicatus* (green algae) - > 500 mg/l - 72 h

Transportation precautions: The railway transportation should be in strict accordance with the dangerous goods loading table in the Ministry of Railways "Dangerous Goods Transport Rules". Transport vehicles should be equipped with the appropriate variety and quantity of fire equipment and leakage emergency treatment equipment. It is best to transport early and early in summer. Transportation, food chemicals and other mixed transportation. During transportation, it should be protected from sunlight, rain and high temperature. Stay away from fire, heat source and high

temperature area during stopover. The exhaust pipe of the vehicle carrying the article must be equipped with a fire retardant device, and the loading and unloading of mechanical equipment and tools that are easy to produce sparks is prohibited. Road transport should follow the prescribed route, do not stay in residential areas and densely populated areas. It is forbidden to slip them in railway transportation. It is strictly prohibited to use wooden or cement ships for bulk transport.

Not classified as dangerous in the meaning of transport regulations.

SECTION 15: REGULATORY INFORMATION

GHS Classification / Hazard Statement Codes:	Serious eye damage(Category 1),H318
SARA 302 Components:	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title II, Section 302.
SARA 313 Components:	SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title II, Section 313.
SARA 311/312 Hazards :	Acute Health Hazard
Fire:	1
Reactive:	0
California Prop. 65 Components:	This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.
Massachusetts Right To Know Components	No components are subject to the Massachusetts Right to Know Act.
Pennsylvania Right To Know Components	Component:2,2 Dimethylpropane- 1,3-diol CAS-No. :126-30-7
New Jersey Right To Know Components	Component:2,2 Dimethylpropane- 1,3-diol CAS-No. :126-30-7

SECTION 16: OTHER INFORMATION

As the conditions or methods of use of this NPG product are beyond our control, we do not assume any responsibility for and expressly disclaim any liability for any use of this material. Information contained herein is believed to be true and accurate, but all statements or recommendations are made without warranty, express or implied, regarding the accuracy of the

information, the hazards connected with use of the material or the results to be obtained from the use of the information or material. Compliance with all applicable federal, state, and local laws and regulations remains the responsibility of the user.

Full text of H-Statements referred to under sections 2 and 3.

Eye Dam. Serious eye damage

H318 Causes serious eye damage.

HMIS Rating

Health hazard: 2

Flammability: 1

Physical Hazard 0

NFPA Rating

Health hazard: 2

Fire Hazard: 1

Reactivity Hazard: 0

ACGIH:	American Conference of Governmental Industrial Hygienists
ANSI	American National Standards Institute
C:	Ceiling Limit
CAS#:	Chemical Abstracts System Number
CERCLA:	Comprehensive Environmental Response, Compensation, & Liability Act
DOT:	Department of Transportation
DSL:	Domestic Substance List
EC50 :	Effective concentration that inhibits the endpoint to 50% of control population
EINECS:	European Inventory of Existing Commercial Chemical Substances
EPA:	U.S. Environmental Protection Agency
ESIS:	European Chemical Substances Information System
HMIS:	Hazardous Materials Identification System
IARC:	International Agency for Research on Cancer
IDLH:	Immediately Dangerous to Life and Health
IATA:	International Air Transport Association
IMDG:	International Maritime Dangerous Goods
LC50 :	Concentration of air resulting in death to 50% of experimental animals
LD50 :	Administered dose resulting in death to 50% of experimental animals
LEL:	Lower Explosive Limit
MSHA:	Mine Safety and Health Administration
NFPA:	National Fire Protection Association
NIOSH:	National Institute for Occupational Safety and Health
NTP:	National Toxicology Program
OSHA:	Occupational Safety and Health Administration
PEL:	Permissible Exposure Limit
PPE :	Personal Protective Equipment
RCRA:	Resource Conservation and Recovery Act
SARA:	Superfund Amendments and Reauthorization Act
STEL:	Short Term Exposure Limit

STP:	Standard Temperature and Pressure
TLV:	Threshold Limit Value
TSCA:	Toxic Substances Control Act
TWA:	Time Weighted Average
UEL:	Upper Explosive Limit
WHMIS:	Workplace Hazardous Materials Information System