

Safety Data Sheet (MSDS)

(According to GB/T 16483, GB/T 17519, and GHS Standards)

SECTION 1: Identification

1.1 Product Identifiers

- Product Name: 1,5-Pentanediol
- Product Number: PD-20260309
- Brand: TECHPURE
- CAS-No.: 111-29-5
- Synonyms: Pentane-1,5-diol

1.2 Details of the supplier of the safety data sheet

- Company : NEWAY SINOPHC TECH. LIMITED
- RM. 204, BUILDING 3, NO. 188, AONA RD., CHINA (SHANGHAI)PILOT FREE TRADE ZONE.
- Telephone : +86-021-50350029
- Fax : +86-021-50350029

1.3 Emergency telephone

Emergency Phone # : +86-021-50350029
(CHEMTREC)

1.4 Uses & Restrictions

- Identified Uses: Polymer synthesis, cosmetic humectant, pharmaceutical excipient, industrial additive.
- Uses Advised Against: No major restrictions; avoid excessive ingestion.

SECTION 2: Hazards Identification

2.1 GHS Classification

- Skin irritation (Category 2)
- Eye irritation (Category 2)
- Aquatic toxicity (Category 3)

2.2 GHS Label Elements

- Hazard Pictogram: Irritant; Environment
- Signal Word: Warning
- Hazard Statements: H315 (Causes skin irritation); H319 (Causes serious eye irritation); H402 (Harmful to aquatic life)
- Precautionary Statements: P260 (Do not breathe vapor); P280 (Wear protective gloves/eye protection); P304+P340 (If inhaled: Remove to fresh air); P391 (Collect spillage); P403+P233 (Store in well-ventilated place)

2.3 Physical & Chemical Hazards: Non-flammable; no physical/chemical hazards under normal use.2.4 Health Hazards: Mild skin/eye irritation; excessive ingestion may cause gastrointestinal discomfort.2.5 Environmental Hazards: Harmful to aquatic life; fully biodegradable.2.6 Other Hazards: None.

SECTION 3: Composition/Information on Ingredients

- Substance / Mixture: Pure substance
- Active Component: 1,5-Pentanediol (CAS 111-29-5)
- Concentration: $\geq 99.0\%$
- Impurities: $\leq 1.0\%$ (Water, other pentanediol isomers)

SECTION 4: First Aid Measures

- Inhaled: Move to fresh air; seek medical attention if discomfort persists.
- Skin Contact: Rinse with running water for 10 minutes; remove contaminated clothing.
- Eye Contact: Rinse with plenty of water for 15 minutes; consult a doctor if irritation remains.
- Swallowed: Rinse mouth with water; seek medical attention if large amounts are ingested.

SECTION 5: Firefighting Measures

- Suitable Extinguishing Media: Dry powder, CO₂, foam, water spray.
- Unsuitable Extinguishing Media: None.
- Special Hazards: Non-flammable; no hazardous combustion gases.
- Advice for Firefighters: Wear standard fire-fighting gear.

SECTION 6: Accidental Release Measures

- Personal Precautions: Wear gloves for direct contact; evacuate non-essential personnel for large spills.
- Environmental Precautions: Prevent entry into watercourses.
- Clean-Up Methods: Small spills: Absorb with inert materials; large spills: Contain and transfer to sealed containers.

SECTION 7: Handling and Storage

- Handling: Operate in well-ventilated areas; wash hands after handling.
- Storage: Cool, dry, well-ventilated warehouse ($\leq 30^{\circ}\text{C}$); sealed, away from heat/oxidizers.
- Incompatibilities: Strong oxidizers, acids, bases.
- Shelf Life: 24 months (unopened).

SECTION 8: Exposure Controls/Personal Protection

- Engineering Controls: Basic ventilation sufficient.
- PPE: Safety glasses (large-scale handling); nitrile rubber gloves (prolonged contact); respiratory protection not required.
- Exposure Limits: TWA (8h): 500 mg/m³ (proposed).

SECTION 9: Physical and Chemical Properties

- Physical State: Liquid; Color: Colorless; Odor: Odorless
- Melting Point: -18°C; Boiling Point: 240.5°C; Flash Point: 129°C
- Density (20°C): 0.991 g/cm³; Viscosity (20°C): 130 mPa·s
- Water Solubility: Fully miscible; Vapor Pressure (20°C): < 0.01 kPa
- Autoignition Temperature: 380°C

SECTION 10: Stability and Reactivity

- Stability: Stable under normal conditions.
- Hazardous Reactions: Reacts violently with strong oxidizers/acids.
- Conditions to Avoid: Heat, strong oxidizers, acids, bases.
- Incompatible Materials: Oxidizing agents, strong acids, bases.
- Hazardous Decomposition Products: CO, CO₂ (when burned).

SECTION 11: Toxicological Information

- Acute Toxicity: Oral (Rat, LD₅₀): 3200 mg/kg; Inhalation (Rat, LC₅₀): > 4000 mg/m³ (4h)
- Skin/Eye Irritation: Mild skin irritation; reversible eye irritation.
- Chronic Toxicity: No known chronic effects.
- Reproductive Toxicity: No known reproductive toxicity.

SECTION 12: Ecological Information

- Aquatic Toxicity: Fish (Zebrafish, LC₅₀): > 5000 mg/L (96h); Daphnia (EC₅₀): > 3000 mg/L (48h)
- Biodegradability: Fully biodegradable (BOD₅ /COD = 0.6-0.7)
- Bioaccumulative Potential: None.

SECTION 13: Disposal Considerations

- Product Waste: Dispose as non-hazardous waste; dilute with water for biological treatment.
- Packaging Waste: Rinse with water; dispose as non-hazardous waste or recycle.

SECTION 14: Transport Information

- UN Number: None (Non-hazardous)
- UN Proper Shipping Name: Not dangerous goods
- Transport Hazard Class: None; Packaging Group: None
- Transport Precautions: Avoid collision, direct sunlight, and high temperature.

SECTION 15: Regulatory Information

- National Regulations: Hazardous Chemical Safety Management Regulation (Non-hazardous); Environmental Protection Law.
- International Regulations: GHS (Rev. 9); REACH (EU, listed); TSCA (US, listed).

SECTION 16: Other Information

- Revision Date: 09 MAR 2026
- Disclaimer: This MSDS is based on current data; supplier not liable for improper use.



NEWAY SINOPHC TECH. LIMITED

ADD:RM. 204, BUILDING 3, NO. 188, AONARD., CHINA (SHANGHAI) PILOT FREE TRADE ZONE.
Email:marketing01@newayphc.com; Phone:+86-021-50350029 <https://www.newayphc.com>



纳维盈医化科技
NEWAY SINOPHC TECH