

Safety Data Sheet (MSDS)

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

SECTION 1: Identification

1.1 Product Identifiers

- Product Name: n-Hexane
- Product Number: NH-20260206
- Brand: TECHPURE
- CAS-No.: 110-54-3
- Synonyms: Hexane; n-Hexyl hydride

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: Industrial solvent, extraction agent, cleaning agent, laboratory reagent.
- Uses Advised Against: Food additive, direct contact with food, and use in unventilated enclosed spaces without protection.

SECTION 2: Hazards Identification

2.1 GHS Classification

- Flammable liquids (Category 2)
- Acute toxicity - Inhalation (Category 1)
- Skin irritation (Category 2)
- Eye irritation (Category 2)
- Aquatic toxicity (Category 2)

2.2 GHS Label Elements

- Hazard Pictogram: Flame; Skull and crossbones; Irritant
- Signal Word: Danger
- Hazard Statements: H225 (Highly flammable liquid and vapor); H330 (Fatal if inhaled); H315 (Causes skin irritation); H319 (Causes serious eye irritation); H401 (Toxic to aquatic life)
- Precautionary Statements: P210 (Keep away from heat, hot surfaces, sparks, open flames and other ignition sources); P260 (Do not breathe vapor); P280 (Wear protective gloves/eye protection/face protection); P304+P340 (If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing); P391 (Collect spillage)

2.3 Physical & Chemical Hazards: Highly flammable vapor; may form explosive mixtures with air.

2.4 Health Hazards: Fatal if inhaled; causes skin/eye irritation; prolonged exposure may lead

to peripheral neuropathy.2.5 Environmental Hazards: Toxic to aquatic organisms.2.6 Other Hazards: None.

SECTION 3: Composition/Information on Ingredients

- Substance / Mixture: Pure substance
- Active Component: n-Hexane (CAS 110-54-3)
- Concentration: $\geq 99.0\%$
- Impurities: $\leq 1.0\%$ (Aliphatic hydrocarbon isomers)

SECTION 4: First Aid Measures

- Inhaled: Remove to fresh air immediately. Keep patient calm; give oxygen if breathing is difficult. Seek medical attention at once.
- Skin Contact: Remove contaminated clothing. Rinse skin thoroughly with plenty of running water for 15 minutes. Seek medical advice if irritation persists.
- Eye Contact: Hold eyes open and rinse continuously with plenty of running water for 15 minutes. Remove contact lenses if present. Seek medical attention immediately.
- Swallowed: Do not induce vomiting. Rinse mouth with water. Seek medical attention immediately; bring this MSDS.

SECTION 5: Firefighting Measures

- Suitable Extinguishing Media: Dry powder, carbon dioxide (CO_2), foam, water spray.
- Unsuitable Extinguishing Media: None.
- Special Hazards: Vapors are heavier than air and may travel to ignition sources. Explosive limits: 1.1-7.5% (v/v).
- Advice for Firefighters: Wear self-contained breathing apparatus and full protective clothing. Cool containers with water spray from a safe distance.

SECTION 6: Accidental Release Measures

- Personal Precautions: Evacuate non-essential personnel. Wear appropriate PPE. Ensure good ventilation and eliminate ignition sources.
- Environmental Precautions: Prevent spillage from entering drains, watercourses, or soil.
- Clean-Up Methods: Small spills: Absorb with inert materials (sand, vermiculite) and dispose of as hazardous waste. Large spills: Contain with dikes; transfer to sealed containers for disposal.

SECTION 7: Handling and Storage

- Handling Precautions: Operate in well-ventilated areas. Use anti-static equipment. Avoid contact with skin, eyes, and clothing. Do not siphon by mouth.
- Storage Conditions: Store in cool, dry, well-ventilated warehouses. Keep container tightly closed. Store away from oxidizing agents, heat, and ignition sources. Temperature $\leq 30^\circ\text{C}$.
- Incompatibilities: Strong oxidizers, acids, bases.

SECTION 8: Exposure Controls/Personal Protection

- Engineering Controls: Install local exhaust ventilation; use explosion-proof electrical equipment.
- Personal Protective Equipment:
 - Eye/Face Protection: Chemical safety goggles.
 - Skin Protection: Nitrile rubber gloves, anti-static protective clothing.

- Respiratory Protection: Respirator with organic vapor cartridge (when ventilation is insufficient).
- Exposure Limits: TWA (8h): 100 ppm (350 mg/m³) (OSHA); STEL (15min): 180 ppm (630 mg/m³).

SECTION 9: Physical and Chemical Properties

- Physical State: Liquid
- Color: Colorless
- Odor: Faint aliphatic odor
- Melting Point: -95°C
- Boiling Point: 69°C
- Flash Point (Closed Cup): -22°C
- Autoignition Temperature: 225°C
- Density (20°C): 0.660 g/cm³
- Viscosity (20°C): 0.30 mPa·s
- Water Solubility: Insoluble
- Vapor Pressure (20°C): 17.9 kPa
- Explosive Limits: 1.1-7.5% (v/v)

SECTION 10: Stability and Reactivity

- Stability: Stable under normal conditions.
- Hazardous Reactions: No hazardous reactions under normal use.
- Conditions to Avoid: Heat, sparks, open flames, strong oxidizers.
- Incompatible Materials: Oxidizing agents (e.g., hydrogen peroxide, nitric acid).
- Hazardous Decomposition Products: Carbon monoxide, carbon dioxide (when burned).

SECTION 11: Toxicological Information

- Acute Toxicity: Oral (Rat, LD₅₀): 2500 mg/kg; Inhalation (Rat, LC₅₀): 48000 ppm (4h).
- Skin Irritation: Causes mild to moderate skin irritation.
- Eye Irritation: Causes serious eye irritation.
- Chronic Toxicity: Prolonged inhalation may cause peripheral neuropathy.
- Carcinogenicity: Not classified as carcinogenic by IARC, EPA, or NTP.

SECTION 12: Ecological Information

- Aquatic Toxicity: Fish (Zebrafish, LC₅₀): 100 mg/L (96h); Daphnia (EC₅₀): 80 mg/L (48h).
- Biodegradability: Moderately biodegradable.
- Bioaccumulative Potential: Low bioaccumulation (log K_{oc} = 3.0).
- Environmental Fate: Volatilizes rapidly from water and soil.

SECTION 13: Disposal Considerations

- Waste Treatment: Dispose of as hazardous waste in accordance with local, national, and international regulations. Do not discharge into water or soil.
- Packaging Waste: Rinse containers thoroughly; dispose of as hazardous waste or recycle in compliance with regulations.

SECTION 14: Transport Information

- UN Number: 1208
- UN Proper Shipping Name: HEXANE

- Transport Hazard Class: 3 (Flammable liquid)
- Packaging Group: II
- Marine Pollutant: Yes
- Transport Precautions: Transport in approved hazardous goods containers. Avoid direct sunlight, high temperature, and collision.

SECTION 15: Regulatory Information

- National Regulations (China): Hazardous Chemical Safety Management Regulation; Environmental Protection Law.
- International Regulations: GHS (Rev. 9); REACH (EU, listed); TSCA (US, listed); IMDG Code; IATA-DGR.

SECTION 16: Other Information

- Revision Date: 06 FEB 2026
- Disclaimer: This MSDS is based on current scientific data. The supplier is not liable for damages caused by improper use or non-compliance with safety precautions.