

## Technical Data Sheet (TDS)

### 1. Product Overview

- Product Name: n-Hexane
- English Name: n-Hexane
- CAS Number: 110-54-3
- Formula: C<sub>6</sub> H<sub>14</sub>
- Molecular Weight: 86.18 g/mol
- Product Characteristics: Colorless, clear liquid with a faint aliphatic odor. High-purity aliphatic hydrocarbon solvent with excellent solubility for oils, waxes, and non-polar substances. Volatile, low viscosity, and chemically stable under normal conditions.

### 2. Technical Specifications

Item	Specification
Appearance	Colorless clear liquid
Purity (GC)	≥ 99.0%
Water Content	≤ 0.05%
Density (20°C)	0.659-0.661 g/cm <sup>3</sup>
Boiling Range	68-70°C
Flash Point (Closed Cup)	-22°C
Viscosity (20°C)	0.30 mPa·s
Non-Volatile Residue	≤ 0.005%
Heavy Metals (Pb)	≤ 1 ppm
Heavy Metals (As)	≤ 0.5 ppm
Total Sulfur	≤ 10 ppm

### 3. Product Advantages

1. High Purity: Low impurity content ensures stable performance in industrial applications.
2. Excellent Solvency: Effectively dissolves non-polar compounds, suitable for various extraction and cleaning processes.
3. Controlled Volatility: Balanced evaporation rate for efficient processing without residue.
4. Chemical Stability: Inert under normal use conditions, compatible with most materials.

### 4. Application Fields

- Industrial Cleaning: Precision parts, electronic components, and metal surface cleaning.
- Extraction: Edible oil, plant extract, and pharmaceutical ingredient extraction.
- Solvent Blending: Coatings, adhesives, inks, and rubber processing.
- Laboratory Research: Analytical reagent and reaction solvent.

### 5. Usage Methods

- Dosage: Adjust according to application (10-100% concentration; dilute with compatible solvents if needed).

- Application: Use spray, immersion, or wiping for cleaning; employ closed extraction systems for extraction processes.
- Optimal Conditions: Operate at 15-30°C in well-ventilated areas; avoid high temperature and open flames.

### 6. Packaging & Storage

- Packaging Specifications: 5L HDPE cans, 20L steel drums, 200L steel drums, 1000L IBC totes.
- Storage Conditions: Store in cool, dry, well-ventilated warehouses (temperature  $\leq 30^{\circ}\text{C}$ ). Keep away from heat, sparks, and open flames. Seal tightly when not in use.
- Shelf Life: 12 months (unopened, under specified storage conditions).
- Transportation: Classified as flammable liquid; transport in accordance with hazardous goods regulations.

### 7. Safety & Protection

- Flammable: Keep away from ignition sources; no smoking in storage/use areas.
- Wear protective equipment: Safety glasses, nitrile rubber gloves, and anti-static clothing during handling.
- Avoid inhalation of vapors; ensure adequate ventilation.
- In case of contact with eyes/skin, rinse immediately with plenty of water.

### 8. Quality Assurance

- Manufactured under ISO 9001 quality management system.
- Each batch is accompanied by a COA for compliance verification.
- Provide technical support for application optimization and safety guidance.