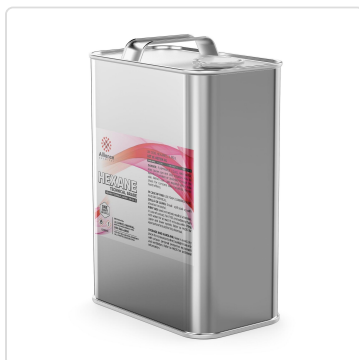


### PRODUCT IDENTIFICATION



**Product Name:** Hexane Technical Grade

**CAS Number:** 110-54-3

**Molecular Formula:** C<sub>6</sub>H<sub>14</sub>

**Molecular Weight:** 86.18 g/mol

**Grade:** Technical Grade

**Purity / Concentration:** Not Available

**Synonyms:** n-Hexane, Hexyl hydride

### PRODUCT OVERVIEW

Hexane Technical Grade is a clear, high-purity solvent characterized by a 96.5% assay and minimal impurity levels, including a water content of just 0.0080%. This versatile hydrocarbon is widely utilized as an efficient extraction agent for essential oils and pharmaceutical ingredients due to its consistent physical properties.

**Grade Significance:** Technical Grade provides a cost-effective solution for industrial and manufacturing processes where high performance is required but analytical-grade purity is not strictly necessary.

### CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay (wt%)	%	96.5	95	—	GC-FID
Color (APHA)	APHA	10	—	15	ASTM D1209
Specific Gravity (20°C)	g/mL	0.66	0.658	0.664	ASTM D4052
Residue After Ignition	%	0.0005	—	0.0010	USP <281>
Water Content	%	0.0080	—	0.01	ASTM E203
Sulfur	ppm	1	—	5	ASTM D5623

ND = Not Detected. Values are typical and may vary by lot.

### PHYSICAL & CHEMICAL PROPERTIES

<b>Appearance</b>	Clear, colorless liquid	<b>Odor</b>	Characteristic hydrocarbon odor
<b>Form</b>	Liquid	<b>Boiling Point</b>	69°C (156.2°F)
<b>Melting / Freezing Point</b>	-95°C (-139°F)	<b>Flash Point</b>	-22°C (-7.6°F)
<b>Specific Gravity</b>	0.654	<b>Solubility</b>	Soluble in organic solvents, insoluble in water
<b>Molecular Formula</b>	C <sub>6</sub> H <sub>14</sub>	<b>Molecular Weight</b>	86.18 g/mol
<b>Vapor Pressure (20°C)</b>	160 mmHg	<b>Viscosity (25°C)</b>	0.36 cP
<b>Refractive Index (20°C)</b>	1.375	<b>Density (25°C)</b>	0.660 g/mL

## APPLICATIONS

1. **Pharmaceuticals** — Used as a primary solvent for the extraction and purification of active pharmaceutical ingredients.
2. **Manufacturing** — Serves as a high-performance degreasing agent for cleaning precision metal parts and industrial machinery.
3. **Laboratory Analysis** — Functions as a reliable mobile phase component in high-performance liquid chromatography applications.
4. **Chemical Synthesis** — Acts as a critical intermediate in the synthesis of various specialty chemicals and complex organic compounds.
5. **Food and Fragrance** — Utilized in the extraction process to isolate high-quality essential oils from botanical sources.

## STORAGE & HANDLING

Due to its high flammability and low flash point of  $-22^{\circ}\text{C}$ , Hexane must be stored in a cool, well-ventilated area away from all ignition sources. Proper containment is essential to prevent the accumulation of vapors, which poses a significant fire risk and potential inhalation hazard.

- Store in a cool, well-ventilated area away from heat sources and open flames.
- Use containers made of HDPE or glass to prevent chemical reactions.
- Keep away from strong oxidizers and acids to avoid hazardous reactions.
- Ensure proper PPE, including gloves and goggles, are worn during handling.
- Avoid prolonged exposure to air to minimize oxidation.

## AVAILABLE PACKAGING

- 1 Quart
- 1 Gallon
- 5 Gallon
- 55 Gallon

## SAFETY SUMMARY (CROSS-REFERENCE TO SDS)

Signal Word: **Danger**



### Hazard Statements:

- H225: Highly Flammable liquid and vapor [Danger Flammable liquids]
- H304: May be fatal if swallowed and enters airways [Danger Aspiration hazard]
- H315: Causes skin irritation [Warning Skin corrosion/irritation]
- H336: May cause drowsiness or dizziness [Warning Specific target organ toxicity, single exposure; Narcotic effects]
- H361f \*\*\*: Suspected of damaging fertility [Warning Reproductive toxicity]
- H372: Causes damage to organs through prolonged or repeated exposure [Danger Specific target organ toxicity, repeated exposure]
- H411: Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment, long-term hazard]

**Emergency Contact:** CHEMTEL - 800-255-3924 (24 Hours/Day, 7 Days/Week)

*For complete safety information, refer to the Safety Data Sheet (SDS) for this product.*

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