

### **NORMAL HEXANE**

#### Overview:

Hexane is a clear, colorless liquid hydrocarbon with a mild, gasoline-like odor. It is a member of the alkanes family and is composed of six carbon atoms and fourteen hydrogen atoms (C6H14). Hexane is highly volatile and insoluble in water but is miscible with many organic solvents.

NO	CHARACTERISTICS	VALUE	METHOD
1	Color ( Say bolt)	+30	Say bolt
2	Copper corroision,3hr at 50°C	Max1a	ASTM D1838
3	SP-Gravity at 15.6°C	0.67±0.01 gr/cm <sup>3</sup>	ASTM D1298
4	Heavy metal/pb <sup>2</sup>	Max 5 ppm	ISIRI 5318
5	UV- Absorption Extinction at 240-280(nm) 280-400(nm)	$\leq 0.15$ abs $\leq 0.05$ abs	Comparison to 1 cm air thickness
6	Aromatic( benzene & toluene)	Max 50 ppm	GC
7	Doctor test	Negative	IS 1448
8	Bromine Index	100mg Br/100g Hexane max	ASTM D2710
9	Reaction of aqueous extract	Neutral to methyl orange	ISIRI 5318
10	Sulphur Content	Max 2 ppm	ASTM D5453
11	Residue after evaporation	Max 10mg/Kg	ASTM D1353
12	n-Hexane	Min 60 wt.%	GC

#### **Applications**

Hexane is widely used in industrial and commercial applications, including:

- 1. Solvent in Extraction Processes:
  - Used for extracting edible oils from seeds and vegetables (e.g., soybean, sunflower).
- 2. Chemical Manufacturing:
  - Serves as a solvent in polymerization processes.
- 3. Industrial Cleaning:
  - Used as a degreaser and cleaner in industrial settings.
- 4. Pharmaceutical Applications:
  - Utilized as a solvent in formulations and purification.
- 5. Rubber and Adhesive Industry:
  - Essential in the production of rubber, adhesives, and sealants.
- 6. Laboratory Uses:
  - Commonly used in chromatography and as a reagent in organic synthesis.

## **SAFETY AND PRECAUTIONS**

Hexane is a hazardous chemical and should be handled with care. Below are the safety guidelines:

- 1. Health Hazards:
  - Inhalation: May cause dizziness, nausea, or headaches with prolonged exposure.
  - Skin Contact: Can cause irritation or dryness.
  - Chronic Exposure: Prolonged exposure can lead to nervous system damage.
- 2. First Aid Measures:
  - o Inhalation: Move the person to fresh air immediately and

  - seek medical attention if symptoms persist.

    Skin Contact: Wash the affected area with soap and water.

    Eye Contact: Rinse eyes thoroughly with water for at least 15 minutes and seek medical help.
  - Ingestion: Do not induce vomiting; seek immediate medical attention.
- 3. Personal Protective Equipment (PPE):
  - o Wear chemical-resistant gloves, safety goggles, and a suitable respirator in poorly ventilated areas.
- 4. Fire Hazard:
  - o Hexane is highly flammable. Avoid open flames and sparks in areas where hexane is handled.



## STORAGE AND HANDLING

#### **Storage Conditions:**

- Store in a cool, dry, and well-ventilated area away from heat sources, flames, and incompatible materials (e.g., oxidizing agents).
- Use approved, tightly sealed containers.

#### **Handling Precautions:**

- Avoid prolonged exposure to vapors.
- Use explosion-proof equipment and ensure proper grounding of containers.

#### **Spill Management:**

- Use absorbent materials (e.g., sand or vermiculite) for small spills.
- o Dispose of according to local environmental regulations.

#### **Transportation Information**

- UN Number: UN1208
- Hazard Class: 3 (Flammable Liquid)
- Packing Group: II
- Labels: Flammable Liquid
- Regulations: Comply with local and international transport regulations.

#### Shelf Life and Stability

- Hexane has a shelf life of approximately 12 months under recommended storage conditions.
- Avoid prolonged exposure to light and air, as it may degrade the product over time.

### **Environmental Impact**

Hexane is classified as a volatile organic compound (VOC) and can contribute to air pollution. Proper disposal and management practices must be observed to minimize environmental harm.

#### **Packaging Options**

- Available in drums (200 liters) and bulk containers.
- · Custom packaging options are available upon request.

# **ABOUT US**

Established in 2017, Chemkraft Chemical Corporation has rapidly emerged as a leading player in the chemicals, petrochemicals, and oil products industry. Strategically headquartered in Germany, with additional offices in Iran, Georgia, and Turkey, we serve as a vital hub for expansive operations across the CIS region, the Middle East, and Europe. Our commitment to excellence, coupled with a robust network, has positioned us as a trusted and reputable entity in the market.

Chemkraft prides itself on delivering high-quality products and exceptional service. Our broad product portfolio includes minerals, industrial chemicals, petrochemicals, and oil products, all sourced from reputable manufacturers to ensure superior quality and reliability. We cater to a diverse range of industries, including manufacturing, pharmaceuticals, agriculture, and more.

Our operations are characterized by extensive expertise in both import and export activities, facilitated by a deep understanding of international trade regulations and logistics. This expertise allows us to provide smooth and efficient transactions, ensuring that our clients receive their products on time and in perfect condition.

Our experienced staff forms the backbone of our operations. Comprised of seasoned professionals with deep industry knowledge, our team is dedicated to providing tailored solutions that meet the specific needs of our clients. This commitment to customer satisfaction ensures that we build long-term relationships based on trust and reliability. Our regional network spans numerous countries in the CIS, the Middle East, and Europe, allowing us to offer localized solutions while maintaining global standards. This extensive reach enables us to respond quickly to market demands and provide our clients with the best possible service.

Chemkraft Chemical Corporation is also deeply committed to quality and sustainability. We adhere to stringent quality control measures at every stage of our operations, ensuring that our products meet international standards and specifications. Additionally, we conduct our business in an environmentally responsible manner, minimizing our environmental impact and promoting sustainable development in the regions we operate.

Our customer-centric approach sets us apart in the industry. We understand that each client has unique requirements, and our team works closely with customers to provide bespoke solutions that address their specific challenges and goals. From inquiry to delivery, our customer support team ensures a seamless experience, prioritizing long-term relationships built on trust and reliability.

Let me know if you'd like any further adjustments.





 For more information about our products and services, please visit our website or contact us directly. We look forward to collaborating with you and contributing to your success.

#### CHEMKRAFT CHEMICAL CORPORATION

- WEBSITE: <u>WWW.CHEMKRAFT.IR</u>
- EMAIL: info@chemkraft.ir
- Iran Office: +98 912 431 10 07 Contact Person Mr. Hossein Moshiri

**CHEMKRAFT CHEMICAL CORPORATION** 

WWW.CHEMKRAFT.IR