



OQ PRODUCT HANDLING GUIDE

n-Heptanoic Acid CAS # 111-14-8



n-Heptanoic Acid is a colorless liquid with a slightly bitter odor. It is soluble in alcohol and ether but insoluble in water. n-Heptanoic Acid is stable under recommended storage conditions, but will burn if heated or exposed to an ignition source.

n-Heptanoic Acid is available from OQ in the following packages:

- UN 1H1/Y1.9/150 55-Gallon High Density Polyethylene Drums

- DOT 111A100W6 Tank Cars or 111A60ALW1
- DOT MC 307 or DOT 407 Tank Trucks
- Ship Tank and Barge

Storage

Recommended Blanketing	Air ^{1,2} or Dry Nitrogen ^{1,2,3}
Recommended Temperature	
Maximum	100°F (37.8°C)
Minimum	32°F (0°C)
Recommended Pressure	Atmospheric
Bulk Quantities	Outside, detached tanks
Small Containers	Cool, dry, well ventilated area

Handling

- Thoroughly review Safety Data Sheet before handling product.
- Keep containers closed when not in use.
- Open containers slowly to allow any excess pressure to vent.
- Keep away from heat, sparks, flame, or other sources of ignition.

- Protect small containers from physical damage.
- Use proper electrical grounding and bonding procedures when loading, unloading, and transferring.¹
- Refer to the OQ Safety Data Sheet for more information on materials to avoid.

- Use spark-resistant tools.
- Electrical equipment and circuits in all storage and handling areas must conform to requirements of national electrical code (Articles 500 and 501) for hazardous location.

See the National Fire Protection Agency (NFPA) #30 "Flammable and Combustible Liquids Code" and consult with qualified fire protection specialists to determine specific storage tank design requirements. Refer to the OQ Safety Data Sheet for more specific health and environmental

information and refer to the OQ Product Descriptions for additional physical properties and general product information. Safety Data Sheet and Product Descriptions for n-Heptanoic Acid are available through your OQ sales representative.

1. Refer to NFPA #77 "Static Electricity" for proper electrical grounding procedures.
2. See the National Fire Protection Agency (NFPA) #30 "Flammable and Combustible Liquids Code" and consult with qualified fire protection specialists to determine specific storage tank design requirements.
3. Blanketing may be used to retain quality in long-term storage conditions.

This information is based on our present state of knowledge and shall be intended to provide general notes on our products and their field of application. It shall therefore not be construed as guaranteeing specific characteristics of the products described and/or their suitability for a particular application. Any existing industrial property rights shall be observed. The quality of our products is warranted under our General Conditions of Sale.

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Materials of Construction for Storage and Transportation

Item	Recommended	Acceptable
Tank	Stainless Steel ¹	Stainless Steel ²
Piping	Stainless Steel ¹	Stainless Steel ²
Valves	Stainless Steel ¹	Stainless Steel ²
Pumps	Stainless Steel ¹	Stainless Steel ²
Relief Valves	Stainless Steel ¹	Stainless Steel ²
Gaskets	Glass Filled PTFE ⁵	Graphite
Pump Seals	Single mechanical seal: Stainless steel/Hastelloy C-276 metallic components ³ , Kalrez O-rings	-
Valve Packing	PTFE ⁵	Graphite
Pipe End Connections	Welded and flanged system	-
Heat Exchanger	Product Side: Alloy C-276 Stainless Steel ¹	Product Side: Stainless Steel ²
Hoses	Stainless Steel ¹	Stainless Steel ²
Tank Truck	Stainless Steel ^{1,2}	Aluminum ⁴
Tank Car	Stainless Steel ^{1,2}	Aluminum ⁴
Barge	Stainless Steel ^{1,2}	-
Ship Tank	Stainless Steel ^{1,2}	-

1. Type 316 Stainless Steel at a temperature less than 300°F (134.7°C).
2. Type 304 Stainless Steel at a temperature less than 140°F (60°C).
3. Use Alloy-C-276 seal components for long service life.
4. Use 3000, 5000, 6000 series Aluminum when the temperature does not exceed 120°F (49°C)
5. Polytetrafluoroethylene.

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