

OXEA PRODUCT HANDLING GUIDE



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Isovaleric Acid – CAS # 503-74-2

Isovaleric Acid, obtained by oxidation of methylbutanal, is a clear, colorless liquid with an unpleasant odor. It is readily miscible with the usual organic solvents. Isovaleric Acid is only sparingly soluble in water. Isovaleric Acid is stable under

recommended storage conditions. Isovaleric Acid will burn when heated or exposed to an ignition source.

Isovaleric Acid is available from OXEA in the following packages:

- UN 1H1/Y1.9/200 55-Gallon High Density Polyethylene Drums

Storage

Recommended Blanketing	Air ^{1,2} or Dry Nitrogen
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 Material 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 OXEA Material 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 OXEA Material Safety Data Sheet for more specific health and environmental

information and refer to the OXEA Product Descriptions for additional physical properties and general product information. Material Safety Data Sheet and Product Descriptions for Isovaleric Acid are available through your OXEA 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.

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Isovaleric Acid

Materials of Construction for Storage and Transportation

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

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

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

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