



OQ PRODUCT HANDLING GUIDE

1,3-BG (Cosmetic Quality) CAS # 107-88-0



1,3-Butylene Glycol is a clear, colorless, bittersweet liquid. It is soluble in water, lower alcohols, ketones, and esters. It is stable under recommended storage conditions.

1,3-Butylene Glycol is available from OQ in the following packages:

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

- DOT 111A100W1 Tank Cars Lined
- 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	90°F (32.2°C)
Minimum	60°F (15.6°C)
Recommended Pressure	Atmospheric
Bulk Quantities	Inside or outside tanks
Small Containers	Dry 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.

- 1,3-Butylene Glycol is hygroscopic. To maintain product quality, avoid contact with undried air.
- Overheating for prolonged periods may cause undesirable degradation that can lead to taste and odor problems.

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 1,3-Butylene Glycol 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.



Materials of Construction for Storage and Transportation

Item	Recommended	Acceptable
Tank	Carbon Steel ⁴ (rust free)	Stainless Steel ¹ Lined Carbon Steel ² , Aluminum
Piping	Carbon Steel	Stainless Steel ¹ , Aluminum
Valves	Carbon Steel	Stainless Steel ¹ , Aluminum
Pumps ³	Cast Iron, Carbon Steel	Stainless Steel ¹
Relief Valves	Stainless Steel ¹	Carbon Steel
Gaskets	EPDM ⁵	Butyl Rubber
Pump Seals	Single mechanical seal: Stainless steel/Hastelloy C-276 metallic components, EPDM ⁵ O-rings	-
Valve Packing	PTFE ⁶	Braided PTFE ⁶
Pipe End Connections	Welded and flanged system	Threaded with PTFE ⁶ tape thread lubricant
Heat Exchanger	Product Side: Stainless Steel ¹	Product Side: Carbon Steel
Hoses	Stainless Steel ¹	Aluminum
Tank Truck	Stainless Steel ¹	Aluminum
Tank Car	Lined Carbon Steel ²	Aluminum
Barge	Stainless Steel ¹	Zinc Silicate or Epoxy Lined Carbon Steel
Ship Tank	Stainless Steel ¹	Zinc Silicate or Epoxy Lined Carbon Steel

1. Type 304 or 316 Stainless Steel.
2. Lining refers to a high baked phenolic.

3. Pumps should be designed to handle high viscosities associated with winter temperatures.
4. Phosphate treated or passivated.

5. Ethylene – Propylene – diene – monomer – (peroxide cured grade).
6. Polytetrafluoroethylene.

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.