

PRODUCT HANDLING GUIDE

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Dimethylamine, Anhydrous – 124-40-3

Dimethylamine is a flammable gas at room temperature / atmospheric pressure, with an ammonia-like odor. When the product is cooled and compressed, it forms a colorless liquid that is completely soluble with water.

Dimethylamine is stable under recommended storage conditions. Dimethylamine is available from Celanese Chemicals in the following packages:

- DOT MC 330 or MC 331 Tank Trucks
- 105A300W or 112S340W Rail Cars

Storage

Recommended Blanketing	Dry Nitrogen ^{1,2,3}
Recommended Temperature Maximum	100°F (37.8°C)
Recommended Pressure gauge	4 kg/cm ² (56.9 psig)
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 Celanese Chemicals 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 Celanese Chemicals Material Safety Data Sheet for more specific health and environmental

information and refer to the Celanese Chemicals Product Descriptions for additional physical properties and general product information. Material Safety Data Sheet and Product Descriptions for Dimethylamine are available through your Celanese Chemicals 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. Nitrogen blanketing should be used to retain quality. A white precipitate can form when product is exposed to air.

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Materials of Construction for Storage and Transportation

Item	Recommended	Acceptable
Tank	Carbon Steel (rust free)	Stainless Steel ¹
Pip ing	Carbon Steel	Stainless Steel ¹
Valves	Carbon Steel	Stainless Steel ¹
Pumps	Carbon Steel	Stainless Steel ¹
Relief Valves	Carbon Steel	Stainless Steel ¹
Gaskets	Stainless steel spiral wound gaskets with compressed graphite filler ²	Glass Filled PTFE ³
Pump Seals	Single mechanical seal: Stainless steel/Hastelloy C-276 metallic components, Kalrez O-rings	-
Valve Packing	PTFE ³	Graphite ²
Pipe End Connections	Welded system	Flanged
Heat Exchanger	Product Side: Stainless Steel ¹	Product Side: Carbon Steel
Hoses	Stainless Steel ¹	-
Tank Truck	<u>Carbon Steel (rust free)</u>	Stainless Steel ¹
Tank Car	Carbon Steel (<u>rust free</u>)	Stainless Steel ¹

1. Type 304 or 316 Stainless Steel.
2. Use only with amine compatible binders or grades.
3. 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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