

DESCRIPTION

Di-n-Propylamine is a colorless, flammable liquid with an ammonialike odor. It is soluble in water, ethanol, benzene, and ethyl acetate. It is stable under recommended storage conditions. Mainly used as a chemical intermediate or a starting material for the synthesis of herbicidal products, e.g. trifluralin, oryzalin, EPTC, and vernolate.

PHYSICAL AND CHEMICAL PROPERTIES

TYPICAL PROPERTIES	SPECIFICATIONS
CAS Number	142-84-7
EC Number	205-565-9
Formula	C ₆ H ₁₅ N
Molecular Weight	101.19 g/mol
Physical State	Liquid
Flammability Limits	0.9% (lower limit); 11.4% (upper limit)
Flash Point (C.C)	45.0 °F (7.2 °C) Closed Cup
Autoignition Temp.	570.2 °F (299 °C)
Melting Point	-81.4 °F (-63 °C)
Boiling Point	228.2 °F (109 °C)
Odor	Ammonia-like.
Density	0.738 (20°C)
Threshold (odor)	Low: 0.1 [mmHg], High: 0.2 [mmHg]
Vapor density	3.49 (Air = 1, 20°C)
Vapor Pressure	20.7 mm Hg (20°C)
Kinematic Viscosity	0.7155 mm ² /s estimated
Water Solubility	5.1 % (20°C)

PRODUCT SPECIFICATIONS

ASSAY	SPECIFICATIONS
Di-n-propylamine (Assay)	99.2 %
Water	0.20 %
Platinum-Cobalt Color	15 max
n-Propanol	0.10 %
n-Propylamine	0.10 %
Tri-n-Propylamine	0.10 %

STORAGE AND HANDLING

HANDLING RECOMMENDATIONS

- 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 U. S. Amines 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.

STORAGE RECOMMENDATIONS

Recommended Blanketing	Dry Nitrogen ^{1,2,3}
Maximum	 100 °F (37.8 °C)
Minimum	 0 °F (-17.8 °C)
Recommended Pressure	Atmospheric
Bulk Quantities	Outside, detached tanks
Small Containers	Cool, dry, well-ventilated area

Note: 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.

1. Refer to the U. S. Amines Safety Data Sheet for more specific health and environmental information. Safety Data Sheet and Product Descriptions for Di-n-Propylamine are available through your AdvanSix / U. S. Amines sales representative or @ AdvanSix.com 2. Refer to NFPA #77 "Static Electricity" for proper electrical grounding procedures. 3. 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. 4. Nitrogen blanketing should be used to retain quality. A white precipitate can form when product is exposed to air.

NOTE

The values presented in this data sheet are typical values and are not to be interpreted as product specifications.

CONTACT ADVANSIX

Contact AdvanSix to learn more about the benefits of our Chemical Intermediates

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