



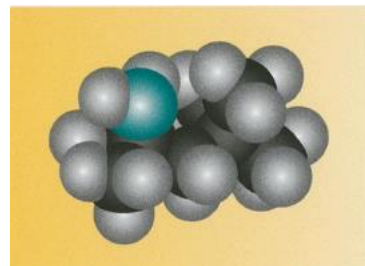
PRIMENE™ TOA AMINE

Description

PRIMENE™ TOA is a primary aliphatic amine with highly branched alkyl chains in which the amino nitrogen atom is linked to a tertiary carbon to give the t-alkyl grouping shown right side.

It is pure amine with C8 chain length.

The material has unique chemical and physical properties, including excellent resistance to oxidation, fluidity and low viscosity over a wide range of temperature, outstanding color stability, and high solubility in petroleum hydrocarbons. These unique properties often extend to the derivatives of this amine. Of particular interest are the salts of organic acids, phenols, complex inorganic acids based on heavy metals, and other compounds that show unusually low solubility in oils and hydrocarbon solvents. Solubilization of such materials by PRIMENE™ TOA permits the use of the salts in applications where effectiveness depends on solubility.



Typical Physical Properties

PRIMENE™ TOA

CAS number	107-45-9
Molecular Weight	129
Freeze/Pour Point, °C	<-74
Flash Point, °C	27
Specific gravity @ 25 °C	0.771
Boiling range, °C @ 760 mm	137-143
Viscosity @ 25 °C	1.4 cSt
Basic Strength, pK _b @ 25°C	11

These are typical properties, not to be construed as specifications.

Product Specifications

PRIMENE™ TOA

Certificate of analysis including each of the following measured parameters is available

Appearance	Clear, free of haze and sediment
Assay %	98.5 min
Color, APHA	25 max
Specific Gravity @ 25° C	0.76 – 0.78
Neutral Equivalent	126-133
Water Content %	0.30 Max.

Typical Uses

PRIMENE™ TOA has been utilized to great advantage in several applications including the manufacture of petroleum additives, hindered amine light stabilizers, and as a specialty extraction agent. Its superior solubilizing properties make the synthesis of a variety of stable, oil soluble salts or derivatives possible where corresponding products from linear alkyl amines are unstable.

PACKAGING OPTIONS

The product is available in 15 kilogram steel pails and in 159 kilogram steel drums



Handling Precautions

Before using this product, consult the Safety Data Sheet (SDS) for details on product hazards, recommended handling precautions and product storage.

CAUTION! Keep combustible and/or flammable products and their vapors away from heat, sparks, flames and other sources of ignition including static discharge. Processing or operating at temperatures near or above product flashpoint may pose a fire hazard. Use appropriate grounding and bonding techniques to manage static discharge hazards.

Storage

PRIMENE™ TOA t-alkyl primary amine may be stored in carbon steel equipment. Other material such as stainless steel may be used. Copper and copper containing alloys should not be used however, since these materials are attacked by PRIMENE™ TOA. Since carbon steel is generally less expensive than other materials of construction, it is recommended that carbon steel should be used for tank, pump, lines and all auxiliary equipment. PRIMENE™ TOA is free of autocatalytic degeneration under storage condition. It is possible, however, to experience an increase in color on prolonged storage. Color formation is minimized by inerting in the tank with nitrogen.

The product should be stored away from excessive heat sources and all potential ignition sources. If product containers are kept sealed and dry and extreme temperatures are avoided the shelf life of the material is greater than 3 years.

Disposal Considerations

Dispose in accordance with all local, state (provincial) and federal regulations. Empty containers may contain hazardous residues. This material and its container must be disposed in a safe and legal manner. It is the user's responsibility to verify that treatment and disposal procedures comply with local, state (provincial) and federal regulations.

Product Stewardship

Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products - from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

Customer Notice

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.

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