



TRIFUNCTIONAL PRIMARY AMINE



### KEY CHARACTERISTICS

- High boiling point
- Low vapor pressure
- Low to no smell
- Low color mostly clear
- High amine value
- Trifunctional nine-carbon structure provides toughness, flexibility and high cross-linking density



Adhesives



Asphalt Additives



**Corrosion Protection** 



Oil and Gas



**Plastic Additives** 



TRIFUNCTIONAL PRIMARY AMINE

Hexatran<sup>™</sup> is a unique trifunctional primary amine available in a variety of grades. Hexatran has an equal to or better performance to other amines in part because of its low odor profile and consistent quality. Hexatran provides a consistent raw material basis compared to other amines (TEPA, TETA, DETA) typically used in these applications. Hexatran can be functionalized to control the curing process.

#### **EPOXY**

- Provides improved curing time, chemical resistance and excellent flex.
- Excellent replacement or supplement for other amines like TETA, TEPA, DETA and IPDA.
- Easily modified into other key derivatives for the epoxy marketplace.

#### **OIL AND GAS**

- Derivatives used in scale inhibition, drilling fluid emulsifiers, vapor phase and film forming corrosion inhibition.
- Used to produce a semi-permanent clay/shale stabilizer with better performance than choline chloride and potassium chloride (KCl) and similar performance to HMD, but with superior permanence.
- Used to remove hydrogen sulfide and carbon dioxide from gas streams.

#### **ISOCYANATES**

- Unique aliphatic structure provides alternate routes to carbamates and isocyanates.
- Isocyanates produced from Hexatran have low viscosity at high solids, promoting easy workability.
- Urethanes produced from Hexatran isocyanates have great chemical and weather resistance that promote high adhesion and non-yellowing attributes.

#### PROPERTIES

Molecular weight	173.3
Chemical formula	$C_9H_{23}N_3$
Appearance @ 20°C	Clear liquid
Color, APHA	<45
Boiling point (°C)	
760mm Hg	291
10mm Hg	161
Melting point (°C)	-20
Density @ 25°C (g/cc)	0.93
Viscosity @ 25°C (cps)	15
Flash point (Open Cup) °C	163
Sat. vapor conc., ppm	<2
pH (~10% water soln)	12
Amine value (meq/gm)	18
Solubility	
water	infinite
alcohols	infinite
ketones	infinite
aromatic hydrocarbons	infinite
aliphatic hydrocarbons	infinite

# **About Ascend**

Ascend Performance Materials is a global leader in the production of high-quality plastics, chemicals, and fibers. As the world's largest fully integrated manufacturer of nylon 6,6 resin, our manufacturing processes are vertically integrated, ensuring the highest level of quality and economies of scale. Ascend's specialty chemicals and blends of acids, amines and esters are used in a variety of applications and industries. We offer customized solutions through formulated products and superior technical support.

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## inspiring everyday

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