

Alpha Methylstyrene

Description

Alpha methylstyrene (AMS) from AdvanSix is produced by the partial oxidation of cumene. It is commonly used in a variety of applications to improve product functionality, including acrylonitrile butadiene styrene (ABS) plastics, pure monomer tackifying resins and water-based styrene acrylic inks.

Physical and Chemical Properties

Typical Properties	Specifications	
CAS Number	98-83-9	
Chemical Formula	C ₆ H ₅ C(CH ₃)CH ₂	
Other/Generic Names	Alpha-methylstyrene, AMS, isopropenyl benzene	
Appearance	Clear water white liquid	
Physical State	Liquid	
Molecular Weight	118.2	
Odor	Pungent, Aromatic	
Density @ 25°C (77°F)	7.562 lb/gal	
Specific Gravity @ 20°C/68°F)	0.91	
Vapor Density (Air $= 1.0$)	4.1	
Viscosity of Liquid @ 40°C (104°F)	0.73 cP	
Viscosity of Liquid @ 60°C (140°F)	0.59 cP	
Viscosity of Liquid @ 80°C (176°F)	0.48 cP	
Water Solubility (miscibility)	Negligible	
Explosive Limits (by volume in air)	Lower = 1.9 , Upper = 6.1	
Flash Point, Open Cup	57.8°C (136°F)	
Flash Point, Closed Cup	47.8°C (118°F)	
Refractive Index @ 20°C	1.5386	
Autoignition Temperature	573.9°C (1065°F)	
Boiling Point (760 mm)	165.1°C (329.2°F)	
Melting Point	-22.8°C (-9.04°F)	
Color	Colorless	

See Product Specifications table on page 2.

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

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Product Specifications

Typical Properties	Specifications	Test Method
Appearance	Clear water white liquid	Visual
Color, APHA	20 Max.	D-1209
Specific Gravity 15.5°C (59.9 F)	0.912-0.915	D-268
Specific Gravity 25°C (77 F)	0.903-0.908	D-268
Purity, Weight %	99.3 Min.	D-6144
Phenol Content, ppm	20 Max.	D-3160
Inhibitor Content (p-TBC), ppm	10-20	D-6144

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Contact AdvanSix

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