

HyPrene 100E

Naphthenic Process Oil Marketing Specification

This severely hydrotreated naphthenic process oil provides good solvency for the rubber and chemical processing industries. It has a low pour point, a low odor level, excellent color, and resistance to discoloration by heat or ultraviolet light.

TEST DESCRIPTION	TEST METHOD	SPECIFICATIONS		TYPICAL VALUES
		MIN	MAX	
Physical Properties				
Viscosity, SUS at 100°F (37.8°C)	ASTM D2161	108.0	131.0	120.0
Viscosity, SUS at 210°F (98.9°C)	ASTM D2161			39.1
Viscosity, cSt at 40°C (104°F)	ASTM D445	20.5	25.0	22.8
Viscosity, cSt at 100°C (212°F)	ASTM D445			3.8
API Gravity, 60°F (15.6°C)	ASTM D1250			24.3
Specific Gravity, 60°F (15.6°C)	ASTM D4052			0.9083
Viscosity-Gravity Constant	ASTM D2501			0.869
Density, lbs/gal at 60°F	ASTM D1250			7.564
Density at 15.6°C, g/cm ³	ASTM D1250			0.9074
Molecular Weight	ASTM D2502			307
Flash Point, COC, °F (°C)	ASTM D92	325 (163)		345 (174)
Flash Point, PMCC, °F (°C)	ASTM D93	304 (151)		320 (160)
Color, ASTM	ASTM D6045		1.0	L0.5
Pour Point, °F (°C)	ASTM D5949		-30 (-34)	-56 (-49)
Volatility, wt%, 225°F (Evap. Loss)	ASTM D972			11.2
Water Content	ASTM D7546M		PASS	PASS
Appearance	ASTM D4176M		PASS	PASS
Chemical Properties				
Acid Number, mg KOH/g	ASTM D664		0.05	0.01
Aniline Point, °F (°C)	ASTM D611	158 (70)	176 (80)	171 (77)
Sulfur, ppm	ASTM D4294		750	320
Refractive Index, 20°C (68°F)	ASTM D1218			1.4951
UV Absorptivity at 260 nm	ASTM D2008		2.50	1.09
Clay-Gel, wt%	ASTM D2007			
Asphaltenes				<0.1
Polar Compounds				<0.1
Aromatics				34.8
Saturates				65.1
Carbon Type Analysis, %	ASTM D2140			
Ca				9
Cn				50
Cp				41
Health and Safety Properties				
Polycyclic Aromatic Compounds, wt%	IP 346		3	<3
Modified Ames Assay, MI	ASTM E1687		1	<1
FDA Regulation	21 CFR 178.3620 (C)		PASS	PASS