

HyPrene 70E

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			71.4
Viscosity, SUS at 210°F (98.9°C)	ASTM D2161			35.4
Viscosity, cSt at 40°C (104°F)	ASTM D445	11.0	15.0	12.4
Viscosity, cSt at 100°C (212°F)	ASTM D445			2.7
API Gravity, 60°F (15.6°C)	ASTM D1250			27.3
Specific Gravity, 60°F (15.6°C)	ASTM D4052			0.8913
Viscosity-Gravity Constant	ASTM D2501			0.856
Density, lbs/gal at 60°F	ASTM D1250			7.422
Density at 15.6°C, g/cm ³	ASTM D1250			0.8900
Molecular Weight	ASTM D2502			282
Flash Point, COC, °F (°C)	ASTM D92			318 (159)
Flash Point, PMCC, °F (°C)	ASTM D93	289 (143)		296 (147)
Color, ASTM	ASTM D6045		1.0	L0.5
Pour Point, °F (°C)	ASTM D5950		-53 (-47)	-75 (-60)
Volatility, wt%, 225°F (Evap. Loss)	ASTM D972			12.5
Water Content, ppm	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)	169 (76)
Sulfur, ppm	ASTM D4294			166
Refractive Index, 20°C (68°F)	ASTM D1218			1.4871
UV Absorptivity at 260 nm	ASTM D2008			0.95
Clay-Gel, wt%	ASTM D2007			
Asphaltenes				<0.1
Polar Compounds				0.4
Aromatics				27.9
Saturates				71.7
Carbon Type Analysis, %	IR Brandes			
Ca				14
Cn				48
Cp				38
Carbon Type Analysis, %	ASTM D2140			
Ca				7
Cn				48
Cp				45
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