

## HyPrene P100N

### Paraffinic Process Oil Marketing Specification

This severely hydrotreated paraffinic process oil provides excellent color and consistency. It passes the IP 346 labeling requirement.

TEST DESCRIPTION	TEST METHOD	SPECIFICATIONS		TYPICAL VALUES
		MIN	MAX	
<b>Physical Properties</b>				
Viscosity, SUS at 100°F (37.8°C)	ASTM D2161	108.0	120.0	110.5
Viscosity, SUS at 210°F (98.9°C)	ASTM D2161			40.3
Viscosity, cSt at 40°C (104°F)	ASTM D445	20.5	23.0	21.0
Viscosity, cSt at 100°C (212°F)	ASTM D445			4.2
API Gravity, 60°F (15.6°C)	ASTM D1250			34.2
Specific Gravity, 60°F (15.6°C)	ASTM D4052			0.8542
Viscosity-Gravity Constant	ASTM D2501			0.802
Density, lbs/gal at 60°F	ASTM D1250			7.121
Density at 15.6°C, g/cm <sup>3</sup>	ASTM D1250			0.8533
Molecular Weight	ASTM D2502			366
Flash Point, COC, °F (°C)	ASTM D92	395 (202)		422 (217)
Flash Point, PMCC, °F (°C)	ASTM D93			403 (206)
Color, ASTM	ASTM D6045		1.5	L0.5
Pour Point, °F (°C)	ASTM D5949		10 (-12)	1 (-17)
Volatility, wt%, 225°F (Evap. Loss)	ASTM D972			0.39
Water Content	ASTM D7546M		PASS	PASS
Appearance	ASTM D4176M		PASS	PASS
<b>Chemical Properties</b>				
Acid Number, mg KOH/g	ASTM D664			0.01
Aniline Point, °F (°C)	ASTM D611	210 (99)	230 (110)	225 (107)
Sulfur, ppm	ASTM D7220			3
Refractive Index, 20°C (68°F)	ASTM D1218			1.4694
UV Absorptivity at 260 nm	ASTM D2008			0.10
Clay-Gel, wt%	ASTM D2007			
Asphaltenes				<0.1
Polar Compounds				<0.1
Aromatics				5.4
Saturates				94.3
Carbon Type Analysis, %	ASTM D2140			
Ca				0
Cn				33
Cp				67
<b>Health and Safety Properties</b>				
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