

## HyGold MVI 1200

### Naphthenic Base Oil Marketing Specification

This severely hydrotreated naphthenic base oil is primarily used in the metalworking and compounder blending 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	
<b>Physical Properties</b>				
Viscosity, SUS at 100°F (37.8°C)	ASTM D2161	1200	1300	1237
Viscosity, SUS at 210°F (98.9°C)	ASTM D2161			82.8
Viscosity, cSt at 40°C (104°F)	ASTM D445	223	241	230
Viscosity, cSt at 100°C (212°F)	ASTM D445			15.7
Viscosity Index	ASTM D2270			56
API Gravity, 60°F (15.6°C)	ASTM D1250			23.1
Specific Gravity, 60°F (15.6°C)	ASTM D4052			0.9153
Viscosity-Gravity Constant	ASTM D2501			0.844
Density, lbs/gal at 60°F	ASTM D1250			7.623
Density at 15.6°C, g/cm <sup>3</sup>	ASTM D1250			0.9145
Molecular Weight	ASTM D2502			505
Flash Point, COC, °F (°C)	ASTM D92	400 (204)		434 (223)
Flash Point, PMCC, °F (°C)	ASTM D93			424 (218)
Color, ASTM	ASTM D6045		2.5	L2.0
Pour Point, °F (°C)	ASTM D5949		20 (-7)	-18 (-1)
Cloud Point, °F (°C)	ASTM D2500			-54 (-48)
Water Content	ASTM D7546M	PASS		PASS
Appearance	ASTM D4176M	PASS		PASS
<b>Chemical Properties</b>				
Acid Number, mg KOH/g	ASTM D664		0.05	0.01
Aniline Point, °F (°C)	ASTM D611	205 (96)	225 (107)	216 (102)
Sulfur, ppm	ASTM D4294			555
<b>Health and Safety Properties</b>				
Polycyclic Aromatic Compounds, wt%	IP 346		3	<3
Modified Ames Assay, MI	ASTM E1687		1	<1

HyGold MVI 1200 is a product of Ergon Refining, Inc.  
February 21, 2017