

## HyGold | Base Oils

Ergon produces naphthenic and paraffinic base oils to exact specifications designed for a variety of applications including: metalworking fluids, greases, industrial lubricants, engine oils, gear oils, additive carriers and diluents.

### **Ergon Refining, Inc.**

Ergon Refining Inc. (ERI) built the Vicksburg, Mississippi, refinery in 1978. With a process capacity of 26,500 barrels (3,800 metric tons) per calendar day of crude oil, the refinery utilizes two high-pressure hydrotreaters and an advanced Residual Oil Supercritical Extraction (ROSE®) de-asphalting unit to refine a range of naphthenic and paraffinic specialty oils from globally sourced, low viscosity-gravity constant crude oil. ERI is the leading naphthenic specialty oil refiner in the world and maintains ISO 9001 quality and ISO 14001 environmental management accreditations.

### **Ergon - West Virginia, Inc.**

Ergon - West Virginia Inc. (EWW) acquired the refinery at Newell, West Virginia, from Quaker State in July 1997. Originally built in 1972, current process capacity exceeds 22,300 barrels (3,100 metric tons) per calendar day of crude oil. In addition to traditional fuel products, the Newell refinery utilizes high-pressure hydrotreating and Methyl Ethyl Ketone (MEK) dewaxing technologies to produce approximately 6,000 barrels (875 metric tons) per day of highly refined specialty petroleum products from virgin Appalachian grade crude oil. EWW maintains ISO 9001 quality management accreditation.

### **Global Distribution**

Following production and certification, both ERI and EWW store the specialty products near the refinery and distribute them via barge, rail and truck directly to customers and bulk storage terminals around the world.

### **Ergon, Inc.**

Headquartered in Flowood, Mississippi, with international operations based out of Belgium, Ergon and its subsidiaries comprise a strategic collection of petroleum-related enterprises founded in 1954 by Leslie B. Lampton. Today, Ergon operates as a sophisticated crude oil processor, transporter and marketer of refined products. Employing over 3,500 people, Ergon maintains a network of strategically located terminals, allowing for efficient distribution worldwide. Ergon markets products in more than 90 countries and remains committed to increasing our global presence through strong relationships and continued investments across all regions.

## **ERGON**

[ergonspecialtyoils.com](http://ergonspecialtyoils.com)

United States & Canada +1 601-933-3000 | Latin America & Mexico +1 832-888-0579

Europe, Middle East, Africa +32 2 351 23 75 | Indonesia +62 (21) 57895839 | Singapore +65 6329 8040

# CONSISTENT SOLUTIONS FROM A TRUSTED PARTNER.

HyGold  
| Base Oils

**HyGold Naphthenic Base Oils**

Typical Property Values\*

TEST DESCRIPTION	TEST METHOD	40	60	100	L150	L200	L300	L500	L600	L750	L1200	L2000
<b>Physical Properties</b>												
Viscosity, SUS at 100°F (37.8°C)	ASTM D2161	38.4	60.3	118	157	210	311	530	614	773	1246	2139
Viscosity, SUS at 210°F (98.9°C)	ASTM D2161	31.0	34.2	39.0	41.2	43.8	48.1	55.5	57.6	63.2	76.9	100
Viscosity, cSt at 40°C (104°F)	ASTM D445	3.6	9.6	22.3	30.0	40.0	59.1	100.2	114.8	144	230	390
Viscosity, cSt at 100°C (212°F)	ASTM D445	1.5	2.4	3.8	4.4	5.2	6.5	8.7	9.3	10.8	14.3	19.7
API Gravity, 60°F (15.6°C)	ASTM D1250	31.4	28.3	24.6	24.3	24.0	23.5	23.0	22.9	22.7	22.1	21.6
Specific Gravity, 60°F (15.6°C)	ASTM D4052	0.8686	0.8854	0.9066	0.9085	0.9103	0.9127	0.9158	0.9166	0.9179	0.9215	0.9244
Viscosity-Gravity Constant	ASTM D2501	-	0.856	0.867	0.865	0.863	0.860	0.857	0.856	0.855	0.853	0.849
Density, lbs/gal at 60°F	ASTM D1250	7.234	7.373	7.550	7.566	7.581	7.601	7.627	7.633	7.644	7.674	7.699
Density at 15.6°C, g/cm <sup>3</sup>	ASTM D1250	0.8678	0.8845	0.9057	0.9076	0.9094	0.9119	0.9150	0.9158	0.9170	0.9205	0.9235
Molecular Weight	ASTM D2502	242	269	305	322	338	360	390	395	417	453	500
Flash Point, COC, °F (°C)	ASTM D92	245 (118)	310 (155)	345 (174)	356 (180)	361 (183)	381 (194)	424 (218)	444 (229)	439 (226)	465 (241)	508 (264)
Flash Point, PMCC, °F (°C)	ASTM D93	228 (109)	287 (142)	318 (159)	325 (163)	331 (166)	346 (174)	388 (198)	412 (211)	404 (207)	428 (220)	457 (236)
Color, ASTM	ASTM D6045	-	L0.5	L0.5	L0.5	L0.5	L0.5	L1.0	L0.5	L1.5	L2.0	L2.0
Pour Point, °F (°C)	ASTM D5949	-	-	-56 (-49)	-47 (-44)	-39 (-40)	-31 (-35)	-27 (-33)	-24 (-31)	-22 (-30)	-19 (-28)	-8 (-22)
Pour Point, °F (°C)	ASTM D5950	-115 (-81)	-80 (-62)	-	-	-	-	-	-	-	-	-
<b>Chemical Properties</b>												
Acid Number, mg KOH/g	ASTM D664	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Aniline Point, °F (°C)	ASTM D611	152 (66)	170 (77)	170 (77)	175 (79)	180 (82)	185 (85)	192 (89)	194 (90)	197 (92)	202 (94)	209 (98)
Sulfur, ppm	ASTM D4294	-	-	293	289	273	273	323	297	432	621	795
Sulfur, ppm	ASTM D7212	-	34	-	-	-	-	-	-	-	-	-
Sulfur, ppm	ASTM D5453	7	-	-	-	-	-	-	-	-	-	-
<b>Health and Safety Properties</b>												
Polycyclic Aromatic Compounds, wt%	IP 346	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Modified Ames Assay, MI	ASTM E1687	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
FDA Regulation	21 CFR 178.3620 (C)	-	PASS	PASS	-	-	-	-	-	-	-	-

\*Typical Property Values presented for general reference only. Please visit [ergonspecialtyoils.com](http://ergonspecialtyoils.com) for detailed Marketing Specifications. HyGold naphthenic base oils are produced by Ergon Refining, Inc. February 2025

**HyGold Paraffinic Base Oils**

Typical Property Values\*

TEST DESCRIPTION	TEST METHOD	P40	P70N	P100N	P150N	P220N	P300N	P150BS	5000BS
<b>Physical Properties</b>									
Viscosity, SUS at 100°F (37.8°C)	ASTM D2161	37.7	67.6	110.5	148	219	312	2472	4995
Viscosity, SUS at 210°F (98.9°C)	ASTM D2161	30.5	35.7	40.3	43.5	48.5	54.4	148	204
Viscosity, cSt at 40°C (104°F)	ASTM D445	3.4	11.5	21.0	28.6	42.6	60.5	461	912
Viscosity, cSt at 100°C (212°F)	ASTM D445	1.3	2.8	4.2	5.1	6.6	8.4	30.2	41.8
Viscosity Index	ASTM D2270	-	79	100	108	109	108	94	82
API Gravity, 60°F (15.6°C)	ASTM D1250	42.0	33.2	34.2	33.7	33.1	32.6	26.8	23.6
Specific Gravity, 60°F (15.6°C)	ASTM D4052	0.8153	0.8591	0.8542	0.8565	0.8598	0.8620	0.8940	0.9122
Viscosity-Gravity Constant	ASTM D2501	-	0.821	0.802	0.799	0.796	0.792	0.800	0.816
Density, lbs/gal at 60°F	ASTM D1250	6.798	7.162	7.121	7.141	7.169	7.187	7.454	7.596
Density at 15.6°C, g/cm <sup>3</sup>	ASTM D1250	0.8145	0.8582	0.8533	0.8556	0.8593	0.8612	-	0.9113
Molecular Weight	ASTM D2502	-	303	366	401	445	488	731	-
Flash Point, COC, °F (°C)	ASTM D92	269 (132)	369 (187)	422 (217)	432 (222)	457 (236)	499 (259)	586 (308)	567 (299)
Flash Point, PMCC, °F (°C)	ASTM D93	246 (119)	349 (176)	403 (206)	415 (213)	433 (223)	474 (246)	-	-
Color, ASTM	ASTM D6045	-	L0.5	L0.5	L0.5	L1.0	L1.0	L3.5	L2.5
Pour Point, °F (°C)	ASTM D5949	-	-2 (-19)	1 (-17)	2 (-17)	2 (-17)	1 (-17)	18 (-8)	-
Pour Point, °F (°C)	ASTM D5950	11 (-12)	-	-	-	-	-	-	14 (-10)
Noack Volatility, wt%	ASTM D5800	-	-	21	16.3	9	3	1	-
<b>Chemical Properties</b>									
Acid Number, mg KOH/g	ASTM D664	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Aniline Point, °F (°C)	ASTM D611	185 (85)	203 (95)	225 (107)	233 (112)	242 (117)	250 (121)	262 (128)	252 (122)
Sulfur, ppm	ASTM D7220	9	3	3	4	4	5	168	-
Sulfur, ppm	ASTM D4294	-	-	-	-	-	-	-	518
<b>Health and Safety Properties</b>									
Polycyclic Aromatic Compounds, wt%	IP 346	-	<3	<3	<3	<3	<3	<3	<3
Modified Ames Assay, MI	ASTM E1687	-	<1	<1	<1	<1	<1	<1	<1
FDA Regulation	21 CFR 178.3620 (C)	-	PASS	PASS	PASS	PASS	PASS	PASS	-

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