

Hydraulic-Fluid	Anti-Mist	Engine Oils	Metal-working Oils	Lubricating Oils	Greases	Bar & Chain	Biobased	NSF
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Tackifiers		Typical viscosity cSt @100C	Treat Level wt %							
V-176	Good shear stability and good string length. PIB in paraffinic oil.	3,000	0.5 - 2.0							
V-177	Concentrated PIB tackifier, with good shear stability and string length.	10,500	0.5 - 2.0							
V-178	Good shear stability and good string length. High concentrate PIB in paraffinic oil.	4,000	0.5 - 2.0							
V-188	OCP tackifier with excellent shear stability and string length.	4,000	0.5 - 2.0							
V-198A	Excellent string length and fair shear stability. PIB in paraffinic oil. Use V-498 for food grade applications.	5,000	0.5 - 2.0							
V-378	Excellent thermal stability, good shear stability and string length. PIB in Group III oil for use at high temperature.	5,000	0.5 - 2.0							
V-422	Good shear stability and good string length. PIB in food grade technical white oil.	3,000	0.5 - 2.0							
V-584	Food grade vegetable based tackifier. Excellent tack.	2,500 @ 40C	3.0 - 10.0							
V-801	Environmentally friendly aqueous polymer solution for use in waterbased and emulsion lubricants.	40,000 @ 40C	0.3 - 5.0							

Viscosity Modifiers		Shear Stability Index (PSSI) ASTM D-6278	1% Treat in ISO 32 cSt @100C	% Treat to Obtain 1000 cSt at 100 C	Viscosity cSt @100C	Treat Level wt %							
V-100	Bale olefin copolymer.	22	12.0 cSt	10.0		0.5 - 1.5							
V-101	Bale olefin copolymer.	45	13.0 cSt	10.0		0.5 - 2.0							
V-158	OCP in paraffinic oil.	50	12% = 11 cSt		1,000	7.0 - 10.0							
V-160	Shear stable polymer solution in paraffinic oil.	22	10% = 12 cSt		1,000	0.5 - 2.0							
V-255	Shear stable polymer in pellet form.	25	10.5 cSt	12.0		0.5 - 2.0							
V-460	Food grade, shear stable viscosity modifier, solution.	20	12% = 14 cSt		3,000	5.0 - 10.0							
V-508F	Food Grade, liquid viscosity modifier for vegetable oil and esters.	28	12% = 45 cSt		7,000	5.0 - 10.0							
V-508M	Liquid viscosity modifier for vegetable oil and esters.	28	14% = 45 cSt		2,500	5.0 - 10.0							
V-515	Polymer solution in vegetable oil.	20	10% = 12 cSt		8,000	2.0 - 16.0							

Grease Additives		Treat Level wt %							
V-191/M	Polymer emulsion for water spray-off and tack for greases with very high water content. May be used in organic and synthetic greases.	0.5%-2.0%							
V-207	Quick dissolving powder polymer added with the cooling oil to grease. Superior shear stability and water spray-off for almost all grease types.	0.5 - 2.0							
V-211	Quick dissolving powder polymer added with the cooling oil to grease. Excellent tack, good shear stability and water spray-off.	0.5 - 2.0							
V-4004A	Liquid polymer to improve shear stability and water spray-off. Easy handling.	1.0 - 5.0							
V-4040P	Powder polymer to improve water spray-off. Added during initial grease reaction.	0.2 - 0.5							
V-4060	Pellet polymer to increase string length and water spray-off in grease.	0.2 - 1.0							

Specialty Packages & Additives		Treat Level wt %							
CA-447	Coupling agent that improves polarity of food grade oils, to enable use of additives.	3.0 - 7.0							
CI-426	Corrosion inhibitor and anti-wear package for food grade applications.	0.5 - 2.0							
CMR-1001	Biobased concrete mold release product that does not stain aluminum or steel forms.	3.0-6.0							
EVO-530	Vegetable emulsifier package used with 50% water to lubricate pistons on pumps and compressors. Performs to -25 C with excellent phase stability.	15 - 30							
HF-546	Biobased hydraulic fluid package, based on HF-560. Meets MIL-PRF-32073, Vickers Vane, and Oxidation tests. TMP compatible.	1.85							
RD-535	Biobased Gear Oil Package 70 pound > Timken and weld load 250 kg. Additive package for rock drill, grease, or open gear application.	2.0 - 7.0							
V-162	Anti-mist additive for oil based coolants. Use MW-612 for aqueous or synthetic fluids.	0.02 - 0.1							
WA-24	Way oil package. Cincinnati Milacron test approved. Excellent demulsibility. Group I Oil compatibility.	1.75							
WA-64	Light color, low odor, compatible in a range of base oils. Cincinnati Milacron & LS-2 approved.	1.75							

Cold Flow Improvers		Treat Level wt %							
PD-555C	Excellent pour point in vegetable oils. Performs up to -33°C. Compatible in sunflower, soybean, canola and TMP-TO.	0.1 - 0.5							
PD-580	Pour point depressant for sunflower, soybean, and canola oils. Performs up to -33°C, DfE approved.	0.1 - 0.5							
PD-610	For use in hydraulic oils, pneumatic tools, tractor fluids, chains saws. Response rate to -55 ° C depending on base oil.	0.1 -0.5							

FUNCTIONAL PRODUCTS INC.

A Solution Company

Purchasing Information

Headquarters

FUNCTIONAL PRODUCTS INC.

8282 Bavaria Road
Macedonia, OH 44056
Phone: 330-963-3060
Fax: 330-963-3322
sales@functionalproducts.com
www.functionalproducts.com

North America

United States

Southeast

(VA, NC, SC, GA, AL, MS, LA, FL)

Lintech International

PO Box 10225
Macon, GA 31297
Phone: 877-546-8324
Fax: 478-784-1745
www.2lintech.com

Midwest

(MO, KS, OK, AR, NM, NE, IA, IL, CO, TX)

Hall Technologies

6300 Bartmer Industrial Drive
St. Louis, MO 63130
Phone: 314-725-2600
Fax: 314-862-7377
www.halltechinc.com

East Coast

(CT, DE, Eastern PA, Eastern NY, NH, NJ, MA, MD, ME, RI, VT)

Ivanhoe Industries, Inc.

818 William Leigh Drive
Building H
Tullytown, PA 19007
Phone: 215-547-1200
Fax: 215-946-7411
Email: w.tuszynski@ivanhoeindustries.com

North America

West Coast

(AK, AZ, CA, ID, HI, MT, NV, OR, UT, WA, WY)

Tri-iso, Inc.

2187 Newcastle Ave, #101
Cardiff by the Sea, CA 92007
Phone: 909.626.4855
Fax: 909.621.9119
Web: www.tri-iso.com

Canada

Tempo Canada Inc

1175 North Service Road West, Suite 200
Oakville, ON Canada
L6M 2W1
Phone: 905-339-3309
Fax: 909-339-3385
Email: bobv@tempo.ca
www.tempo.ca

Mexico

Proaindsa

Toledo 37, Col Alamos
CP 03400 Mexico City DF, Mexico
Phone: 011-52-55-5696-5551
Fax: 011-52-55-5696-5420
www.proaindsa.com

Australia

A. S. Harrison & Co, Pty Ltd.

Mark Anderson, Business Manager - Lubricants
75 Old Pittwater Road
Brookvale, NSW, 2100
Australia
Phone: 61-2-8978-1000
Email: lubricants.ash@harrison.com.au
www.asharrison.com.au

Europe

France, Germany

Lumar France

6 Avenue Eiffel
78420 Carrières sur Seine
France
Tel: +33 130 150 809
Fax: +33 130 150 313
Email: commercial.france@lumarquimica.com
www.lumarquimica.com

Italy

Lumar Italia

Str. Com. Ie per Campagna
20078 San Colombano al Lambro (Milano)
Phone: +39-03-71-20-04-63
Fax: +39-03-71-20-04-45
Email: italia@lumarquimica.com
www.lumarquimica.com

Spain, Turkey

Lumar Quimica, S.L.U.

Milanesat, 25-27, 4t. 1a.
08017 Barcelona
Phone: 34 935 947 500
Fax: 34 935 947 501
www.lumarquimica.com
Email: lumar@lumarquimica.com

Switzerland

Interferm AG

Untermüli 9
CH-6300 Zug
Phone: 0041 41 725 35 10
Fax: 0041 41 725 35 19

Asia

China

Smart Oil & Chemical Limited

Flat F, 23/F, Block 10, Lok Shun Path
Royal Ascot, Shatin
NT, Hong Kong
Phone: 852-2887-5466
Fax: 852-2636-6562
brianay@smart-oil.com

Asia

India

ENVIRON CHEM

A-305/306, Kemp Plaza
Chincholi Bunder Road
Malad (West)
Mumbai - 400 064
Phone: 91-22-4003 9230/31/32
Fax: 91-22-4003 9240
Email: sales@environchem.com

Korea

Inwoo Corp.

2F Weedang Building
50-8 Bangjee-Dong
Songpa Gu, Seoul 138-050
Phone: 82-2-2202-7028
Fax: 82-2-2202-7029
www.inwoocorp.com.kr

Singapore

Eweka International Pte., Ltd.

62 Ubi Road 1
#06-22 Oxley Bizhub 2
Singapore, 408734
Phone: 65-6348-7279
Fax: 65-6745-3865
Email: eweka@pacific.net.sg

Taiwan, ROC

Shiony Chemical Co., Ltd.

12F8, No. 70, Sec. 2
Roosevelt Road
Taipei 100
Phone: 886 2 2356 0258
Fax: 886 2 2396 8928
Email: shiony@ms31.hinet.net
shiony.taipei@msa.hinet.net

Thailand

Connell Brothers Compan, Ltd

B.B. Building, 18th Floor, Unit 1802, No. 54
Sukhumvit 21 Road (Asoke) Klongtoey-Nuea
Wattana, Bangkok 10110
Phone: 66-0-2259-8500
Cell: 66-8-1755-1021
E Mail: wut.c@wecocbc.com
www.connellbrothers.com

www.functionalproducts.com

Certified ISO 9001:2008 REACH Compliant

8282 Bavaria Road - Macedonia, Ohio - 44056

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