



 Lubricants for a Healthier Planet™

SYN-Nth™ Hydraulic Fluids are reduced environmental impact fluids designed for improved energy efficiency and low toxicity. Ultra High Viscosity Index controls viscosity changes at temperature extremes for improved volumetric and mechanical efficiency, which translates into lower energy consumption and decreased carbon footprint. **SYN-Nth Hydraulic Fluids** use a phosphorus anti-wear technology that does not contain heavy metals and is inherently biodegradable in accordance with the OECD 301 B Test method. **SYN-Nth Hydraulic Fluid** is non-toxic to fish and aquatic species as determined by OECD 203 1-12 Test method. It passes the visual “NO SHEEN” requirement of the U.S. EPA Static Sheen Test.

SYN-Nth™ Hydraulic Fluid ISO 46 is registered NSF H2 for use in food processing applications where there is no possibility of food contact.

SYN-Nth Hydraulic Fluid is designed for the following industrial specifications:

ISO 6743-4 HL, HM, HV	Eaton E-FDGN-TB002-E	Eaton (Vickers) I-286-S
DIN 51524-2 HLP	Bosch Rexroth RE 90220	Eaton (Vickers) M-2950-S
DIN 51524-3 HVLP	Danfoss Power Solutions	Fives Cincinnati P-68 (ISO 32)
ASTM D6158-16 HL, HM, HV	Parker Hannifin Denison HF-0	Fives Cincinnati P-70 (ISO 46)
MIL-PRF-17672E (ISO 32, 46, 68)	Parker Hannifin Denison HF-1	Fives Cincinnati P-69 (ISO 68)
Husky Hydraulic System (ISO 46)	Parker Hannifin Denison HF-2	

PRODUCT ATTRIBUTE	TEST METHOD	TYPICAL PROPERTIES				
ISO Grade	ASTM D2422	22	32	46	68	100
Kinematic Viscosity, cSt @ 40°C	ASTM D445	22	32	46	68	100
Kinematic Viscosity, cSt @ 100°C	ASTM D445	5.4	7.1	9.5	12.2	14.7
Viscosity Index No.	ASTM D2270	197	194	195	177	153
Density, g/mL @ 15.6°C	ASTM D1298	0.877	0.866	0.865	0.867	0.865
Density, lb/gal @ 60°F	ASTM D1298	7.32	7.23	7.22	7.23	7.22
Pour Point, °F (°C)	ASTM D97	-71 (-57)	-60 (-51)	-49 (-45)	-33 (-36)	-17 (-27)
Flash Point, °F (°C)	ASTM D92	351(177)	385(196)	401(205)	405(207)	433(223)
Dynamic Viscosity, cP @ -20°C	ASTM D7042	500	860	1300	3000	6900
Dynamic Viscosity, cP @ -30°C	ASTM D7042	1300	2500	3900	13000	-
Dynamic Viscosity, cP @ -40°C	ASTM D7042	4400	11000	21000	-	-
FZG Fail Stage, A/8.3/90	ASTM D5182	n/a	12	>12	>12	>12
Shear Stability, % loss 20 hours	CEC L-45-A	6	7	9	9	9
Demulsibility, oil-water-emulsion (min)	ASTM D1401	40-40-0 (15)	40-40-0 (20)	40-40-0 (20)	39-40-1 (25)	40-40-0 (25)
Dry Filterability Stage 1 & II	ISO 13357-2	Pass				
Wet Filterability Stage 1 & II	ISO 13357-1	Pass				

PRODUCT ATTRIBUTE	TEST METHOD	TYPICAL PROPERTIES				
ISO Grade	ASTM D2422	22	32	46	68	100
Vickers Vane Pump Test	DIN 51389-2	Pass				
Eaton 35VQ25A Pump Test	ASTM D6973	Pass				
Denison Phase I & II	T6H20C	Pass				
Oxidation Stability, Hours	ASTM D943	>10000				
Dielectric Breakdown Voltage	ASTM D877	>45kV				
Phosphorus, ppm	ASTM D5185	520				
Copper Corrosion	ASTM D130	1b				
Rust Test, Distilled Water	ASTM D665A	Pass				
Rust Test, Syn. Sea Water	ASTM D665B	Pass				
Foaming Test, Seq. I, II, and III	ASTM D892	Pass				
Air Release @ 50°C, min	ASTM D3427	4	5	7	9	-
Fluid Cleanliness	ISO 4406	16/14/11 or cleaner*				
Color		Clear Yellow				

Note: Contains additives that may cause optical interference in certain laser particle count test methods.

WARRANTY:

When properly stored and used in accordance with instructions, any material not satisfactory will be replaced with any product in our line on a dollar for dollar basis provided the account is paid in full when due and Hydrotex is notified in writing within 12 months of the date of the order by the customer.

Hydrotex® is a manufacturer and distributor of high performance lubricant and fuel improver solutions. As an employee owned company, we help our customers develop sustainable solutions designed to improve system reliability, save energy, limit pollution, extend fixed asset life, reduce maintenance costs and improve fuel efficiency. Our products and services leverage over 80 years of innovation resulting in superior lubrication solutions and high touch customer service.