

HIDRAULIK SYN PE SERIES

Biodegradable Synthetic Hydraulic Fluids

HIDRAULIK SYN PE Series synthetic hydraulic fluids are formulated from high quality biodegradable synthetic base stocks. They are recommended for most types of hydraulic systems using vane, gear, and piston-type pumps operating at extremes of both temperature and pressure. They afford a higher margin of safety to the environment should a line rupture or an accidental spill occur while at the same time offering performance and reliability superior to traditional mineral or vegetable-oil based fluids.

Applications

- 18 Liters pail, 209 Liters Drum.
- Agricultural, construction, forestry and marine industries.
- Mining, dredging and offshore oil production.
- Recommended for use with piston, vane, and gear-type hydraulic pumps operating at extremes of temperature and pressure where a readily biodegradable, aquatically non-toxic fluid is desirable.

Compatibility

- **HIDRAULIK SYN PE** is compatible with the following seal and elastomeric materials: Viton, High Nitrile Buna N, Nylon, Delrin, Celcon, PBT, Oil-Resistant Alkyd & Teflon.
- Call PETRONAS Company for guidance if you have other questions regarding compatibility.

Customer Benefits

- Improved pumping efficiency
- Excellent high temperature stability
- Excellent compatibility with materials of construction
- Outstanding low temperature properties
- Improved wear protection at elevated temperatures
- Lower deposit formation in high temperature systems
- Extended service life and longer drain intervals
- High degree of chemical stability
- Eliminates degradation and sludgeformation associated with conventional mineral oils

Packaging

- 18 Liters pail, 209 Liters Drum.

Product Typicals

Characteristics	Grade			
	32	46	68	100
Kinematic Viscosity, cSt				
@100°C	6.6	8.7	12.2	14.6
@ 40°C	34.3	49.5	77.8	102
Viscosity Index	152	158	154	148
Pour Point, °F	-65	-70	-70	-50
Flash Point, °F	480	485	500	525
Total Acid Number, mg KOH/g	0.2	0.2	0.4	0.2
Color	<1.0	<1.0	<1.0	<1.0
4-Ball Wear, 40kg, 302°F, 1800 rpm, 60 minutes, mm ²	0.40	0.40	0.40	0.40
Vickers Pump Test, 200°F, 3000 psi, mg wear				
Foam Test, ml	16.0	16.0	16.0	16.0
Copper Corrosion, 275°C, 24 hr				
Oxidation and Corrosion Stability, 250°F, 168 hrs, wt change, mg/cm ²				
Steel	1B	1B	1B	1B
Aluminum	0.05	0.08	0.02	0.06
Magnesium	0.00	0.03	0.08	0.06
Copper	0.03	0.00	0.02	0.05
Zinc	0.15	0.04	0.05	0.09
Viscosity Change, %	0.00	0.14	0.40	0.05
Acid number change	3.7	4.2	3.1	3.7
	0.02	0.05	0.10	0.14

Customer Advice

For further assistance on product MSDS, recommendation or technical queries, please liaise with the regional technical services engineer or contact HQ technical engineers.