

Product Data Sheet

Concord Bio-Synth

Description and Applications

Saheli Concord Bio-Synth series are biodegradable hydraulic oils with extra high viscosity index and extremely low pour point specially designed for forestry machinery and equipment operating in extreme climatic conditions and environmentally sensitive area like Arctic climate area. These are formulated with biodegradable synthetic base stocks and specially selected additive system to meet the requirements of modern hydraulic systems. These oils meet the environmental requirements of Swedish Standard SS 15 54 34 and ISO VG 46 is on the list of environmentally accepted hydraulic fluids by Testing and Research Institute of Sweden (SP).

Features and Benefits

- Specially selected Biodegradable material has a renewable content of more than 90% and hence the product has WGK 1 rating according to the German WGK classification.
- Extremely high viscosity index and love pour point makes these oils suitable for cold climate operation.
- Good thermo-oxidative stability reduces deposit formation and improves pump and valve performance.
- Excellent anti-wear property results in longer pump life and reduced maintenance costs.
- Special rust and corrosion inhibitors protect multi-metallurgy components against corrosion.
- Compatible with multi-metals and sealing materials commonly used in hydraulic systems.

Applications

- High performance, heavy-duty hydraulic and power transmission systems of forestry machinery and equipment operating in extreme climatic conditions like Arctic climate area.
- Other hydraulic systems in marine, construction, mining, agriculture, manufacturing and mobile application requiring such quality biodegradable hydraulic fluids.
- Environmentally sensitive areas requiring fluids, which are virtually non-toxic and readily biodegradable.

Specifications

- DIN ISO 15380, VDMA 24568 HEES
- Swedish Standard SS 15 54 34
- Bosh Rexroth RD 90221-1



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Test Parameters	Test Method	Typical Results		
ISO VG		32	46	68
Density @ 15°C gm/cm3	ASTM D1298	0.868	0.874	0.881
Viscosity Index	ASTM D2270	144	144	147
Viscosity @ 0°C (cSt)	ASTM D 445	178	306	510
Viscosity @ 40°C (cSt)	ASTM D 445	31.4	45.4	65
Pour Point °C	ASTM D 97	-57	-48	-45
Flash Point (COC) °C	ASTM D 92	>190	>310	>310
Rust Test	ASTM D 665A/B	Pass	Pass	Pass
Copper Corrosion (3hrs@ 100°C)	ASTM D 130	`1a	1a	1a
Foam after 10min for all seq.	ASTM D 892	Nil	Nil	Nil
FZG, fail load stage	DIN 51324	11	10	10
Biodegradability, % readily biod.	OECD 301B	>80	>80	>80