



HIDROLEO

INDUSTRY

Description

Top quality oils for hydraulic circuits. Made with top quality paraffin base crude oils, refined using solvents and hydro-finished endowing them with excellent oxidation stability and a high viscosity index. The additives used in its formulation are of the "ashless" kind.

Recommended uses

As it is a hydraulic oil with antiwear additives of the ashless type, it is recommended for use in severe service systems and in conditions with highly demanding filterability: servo-valves, robotics, numeric control systems, etc. In hydraulic engines which work with heavy loads (pressure and temperature). When high variations in the range of temperatures prevail.

Properties

- Excellent EP antiwear properties (FZG).
- Low freezing point, which facilitates good pumpability at low temperatures.
- Good antirust and anticorrosion power. Does not affect copper or its alloys.
- Very good water separation properties (demulsibility).
- Resistance to foam formation and great air release (de-aeration) facility.
- Great resistance to oxidation. Excellent thermal stability.
- Exceptional filterability.
- Very good behaviour against joints and elastomers.

Quality level

- DIN-51524 Part 3 HVLP
- AFNOR NFE 48603 HV
- DENISON HF-0, HF-1 and HF-2
- CINCINNATI MILACRON P-68, P-69, P-70
- SPERRY VICKERS
- SAUER-SUNDSTRAND
- VOITH

Technical characteristics

	UNIT	METHOD	VALUE	VALUE	VALUE	VALUE
ISO Grade			32	46	68	100
Viscosity at 40°C	cSt	ASTM D 445	32.0	46.0	68.0	100
Viscosity at 100°C	cSt	ASTM D 445	6.5	8.3	11.0	14.5
Viscosity rate		ASTM D 2270	155	155	155	155
Density @ 15°C	g/cm ³	ASTM D 4052	0.868	0.874	0.878	0.882
Pour point	°C	ASTM D 97	-39	-39	-36	-36
Flash point	°C	ASTM D 92	190	215	220	230
FZG, Step, min.	°C	DIN 51354	11	11	11	11
4 Balls, scar diameter	mm	ASTM D 4172	0.32	0.32	0.32	0.32
Disemulsion	min	ASTM D 1401	< 25	< 30	< 45	< 45
TAN	mgKOH /g	ASTM D 664	0.4	0.4	0.4	0.4
Resistance to rust (Met. A)		ASTM D 2272	Pass	Pass	Pass	Pass

Available in

ISO grade 32: 185 kg drums. ISO grade 46: Bulk and 185 kg drums. ISO grade 68: 875 kg containers and 185 kg drums. ISO grade 100: 185 kg drums.

■ Hazard identification

This product is not classified as toxic or hazardous under current legislation.

■ Handling

Minimum precautions should be taken to avoid prolonged contact with the skin. The use of gloves, visors or glasses is recommended to avoid splashes.

■ Health and Safety Hazards

Inhalation: Given that it is not a particularly volatile product, the risk of inhalation is minimal.

Ingestion: Do not induce vomiting. Provide water. Seek medical advice.

Contact with the skin: Wash with plenty of water and soap.

Eyes: Wash thoroughly with water.

General measures: Seek medical advice.

■ Fire-fighting measures

No special measures required.

Fire-extinguishing measures: Foams, dry chemicals, CO₂, water spray. Do not apply the jet of water directly as this could cause the product to disperse.

■ Environmental precautions

Danger of physical pollution if spilt (water, coastlines, soil, etc.) due to its floatability and oily consistency that may harm flora and fauna on contact. Avoid material getting into water outlets.

Decontamination and cleaning: Treat like an accidental oil spill. Prevent dispersion using mechanical barriers and remove by physical or chemical means.

A safety information file is available on request.

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Unless otherwise indicated, the figures cited in technical characteristics should be considered typical.

Technical data sheet for Lubricants. Review 3. December 2008.