INDUSTRY



LUBRICANTS FOR INDUSTRIAL USE

DESCRIPTION

Biodegradable fire-resistant hydraulic fluid, especially recommended for use in electric-hydraulic control systems of steam turbines. It is a product formulated with phosphate ester.

PRODUCT APPLICATIONS

- Electric-hydraulic control systems of steam turbines, including the systems that use servo valves.
- As fire-resistant fluid in steam and gas turbines.

PRODUCT PERFORMANCE

- Fire-resistant fluid.
- Superb rust and corrosion resistance.
- Good defoamer and air release properties.

• Recommended by most manufacturers of turbines: Alstom, General Electric, Siemens.

SPECIFICATIONS

- ISO Standard 12922
- ASTM 4293 'Less flammable hydraulic fluids'
- Alstom HTGD 690149 P

- FM Global Group Standard 6930
- SIEMENS TLV 9012 02 and TLV 9012 03ES
- GEK 46357ES

TYPICAL CHARACTERISTICS

CHARACTERISTIC	UNITS	METHOD	CEPSA FUNDICOL SYNT EHC
Density at 20ºc	Kg/l	ASTM D-4052	1,150
O/C flash point	٥C	ASTM D-92	262
O/C fire point	٥C	ASTM D-92	354
Freezing point	٥C	ASTM D-5950	-24
Viscosity at 40°c	cSt	ASTM D-445	44,5
Viscosity at 100°c	cSt	ASTM D-445	5,4
Autoignition point	٥C	DIN 51794	540
Air release at 50°c	min	ASTM D-3427	5,5
Biodegradability	%	OECD 301 B	>60

TABLE OF COMPATIBILITIES

MATERIAL	SEALS, HOSES, ACCUMULATORS	INSULATED CABLES AND WIRES	PAINTS	FILTERS
Acrylic			NR	
Activated Alumina				A
Alkyd Paint			A	
Butyl Rubber	R			
Cellulose				A
Ethylene-Propylene Rubber	Α			
Epoxy Paint (Cured)			R	
Fullers Earth				A
Ion Exchange Resins				R
Natural Rubber	NR			
Chloroprene Rubber (CR) Neoprene	NR			
Nitrocellulose			NR	
Nitrile Butadiene Rubber (NBR)	NR			
Nylon	R	R		
Paper				A
Phenolic Resins			NR	
Polyethylene (PE)		A		
Polypropylene (PP)		A		
Polyurethane Paint			A	
Polyvinyl Chloride (PVC)		NR		
Silicone Rubber	NR	A		
Polytetrafluorethylene (PTFE) Teflon	R	R		
Vinyl Ester Paint			A	
Fluorocarbon Rubber (FPM) Viton	R			

Legend: R - Recommended NR- Not Recommended A - Acceptable

HEALTH & SAFETY AND ENVIRONMENT

Health, safety and environmental information is provided for this product in the Materials Safety Data Sheet. This gives details of potential hazards, precautions and First Aid measures together with environmental effects and disposal of used products.

The typical values of the characteristics appearing in the table are average values given for guidance purposes. These values may be modified without any prior warning.