

HFC water-glycol fire-resistant hydraulic oil

● Performance Overview

Maxtop HFC fire-resistant hydraulic oil is made by using water and ethylene glycol as the base liquid and adding thickening agents, anti-wear agents, antioxidants, rust inhibitors, anti-foaming agents and other various additives. According to international standards, it belongs to the ISO-L-HFC type of water-ethylene glycol non-flammable hydraulic oil.



● Features

01

Excellent fire resistance ensures the safety of oil use when exposed to high temperatures or in contact with open flames.

02

The extremely low freezing point ensures that starting at low temperatures is easy.

03

Excellent high and low temperature stability (stable true solution), no deterioration, storage period up to two years

04

The service life is long. Under normal working conditions and usage scenarios, the service life is not less than 10,000 hours.

05

Excellent lubrication performance ensures the lubrication of the hydraulic oil pump and its service life.

06

Excellent rust prevention and copper corrosion resistance properties for both gas and liquid phases, meeting the rust prevention requirements for both gas and liquid environments.

● Application Scenario

It is widely used in hydraulic systems operating in environments with open flames and high temperatures, and has become an important fire-resistant hydraulic medium. It is mainly applicable to hydraulic systems in industries such as steel, coal mining, light industry, chemical engineering, mechanical processing, plastic processing, etc., which require fire prevention, such as: coke oven doors, coke stoppers, die-casting machines, top material hoppers of furnaces, extruders, lifting mechanisms of blast furnaces, forging machines, opening mechanisms of electric furnaces, feeding mechanisms, casting machines, sliding water outlets of molten steel tanks, continuous casting machines, hot rolling machines, welding robots, plastic extruders, automatic welding fixtures, surface electroplating machines, glass forming machines, etc.

HFC water-glycol fire-resistant hydraulic oil performance indicators

Project	Quality indicators			
Viscosity grade (GB/T 3141)	22	32	46	68
Kinematic viscosity (40°C) / (mm ² /s)	19.8~24.2	28.8~35.2	41.4~50.6	61.2~74.8
Appearance	Clear and transparent			
Water content (mass fraction) /% ≥	35			
Pour point/°C	Report			
Foam characteristics (foam tendency/foam stability) / (mL/mL)				
25°C ≤	300/10			
50°C ≤	300/10			
25°C ≤	300/10			
Air release value (50°C), min ≤	20	20	25	25
pH value (20°C)	8.0~11.0			
Shear stability				
Viscosity change rate (20°C) /%	Report			
Viscosity change rate (40°C) /%	Report			
Change in pH value before and after shear ≤	±1.0			
Change in water content before and after shear /% ≤	8			
Corrosion resistance (35°C ± 1°C, 672h ± 2h)	By			
Density (20°C) / (kg/m ³)	Report			
Rubber compatibility (60°C/168h)				
Nitrile rubber (NBR 1)				
Volume change rate /% ≤	7			
Hardness change ≥/≤	-7/+2			
Stretch strength change rate /%	Report			
Tensile elongation change rate /%	Report			
Core combustion durability	By			
Manifold combustion test	By			
Spray combustion test	C			
Aging characteristics				
pH value increase	C			
Insoluble matter /%	C			
Four-ball machine test				
Maximum no-stall load Pb value /N	C			
Abrasion diameter (1200r/min, 294N, 30min, room temperature) /mm	C			
FZG gear machine test	C			