

HFC水-乙二醇抗燃液压油

●性能概述

迈斯拓HFC抗燃液压油是以水和乙二醇为基础液并加入增稠剂、抗磨剂、抗氧剂、防锈剂、抗泡剂等多种添加剂制造而成。按照国际标准分类属ISO-L-HFC类的水-乙二醇型不燃液压油。



●产品特点

01

优良的抗燃性，保证油品在高温或接触明火时使用安全

02

极低的凝固点，保证低温启动容易

03

极好的高低温稳定性(稳定的真溶液)，不变质，贮存期可达两年

04

良好的气、液相防锈和防铜腐蚀性能，达到气、液两相防锈要求

05

良好的润滑性能，保证液压油泵的润滑和使用寿命

06

使用寿命长，在正常的工况和使用条件下，使用寿命不低于10,000小时

●应用场景

广泛应用于有明火、高温环境下运行的液压系统，成为重要的抗燃液压介质。主要适用于钢铁、煤矿、轻工、化工、机械加工、塑料加工工业中需要防火的液压系统，如：炼焦炉门、拦焦车、压铸机、炉顶料钟、挤压机、转炉烟罩升降机构、锻压机、电炉启盖、倾料机构、铸造机、钢水包滑动水口、连铸机、热轧机、焊接机器人、塑料挤出机、自动焊接夹具、表面电镀机、玻璃成型机等。

项目	质量指标				试验方法
粘度等级 (GB/T 3141)	22	32	46	68	
运动粘度 (40°C) / (mm ² /s)	19.8~24.2	28.8~35.2	41.4~50.6	61.2~74.8	GB/T 265
外观	清澈透明				目测
水分 (质量分数) / %	35				GB/T 0246
倾点 / °C	报告				GB/T 3535
泡沫特性 (泡沫倾向性/泡沫稳定性) / (mL/mL)	300/10				GB/T 12579
25°C 不大于					
50°C 不大于					
25°C 不大于					
空气释放值 (50°C) , min	20	20	25	25	SH/T 0308
PH值 (20°C)	8.0~11.0				ISO 20843
剪切安定性	报告				SH/T 0505
黏度变化率 (20°C) / %					ISO 20843
黏度变化率 (40°C) / %					
剪切前后pH值变化 不大于					
剪切前后水分变化 / % 不大于	8				SH/T 0246
抗腐蚀性 (35°C±1°C, 672h±2h)	通过				SH/T 0752
密度 (20°C) / (kg/m ³)	报告				GB/T 1884
橡胶相容性 (60°C/168h)	7 -7/+2 报告 报告				GB/T 14832
丁腈橡胶(NBR 1)					
体积变化率 / % 不大于					
硬度变化 不小于 / 不大于					
拉伸强度变化率 / %					
扯断伸长率变化率 / %					
芯式燃烧持久性	通过				SH/T 0785
歧管燃烧试验	通过				SH/T 0567
喷射燃烧试验	c				ISO 15029-1
老化特性	c c				ISO 4263-2
ph值增长					
不溶物 / %					
四球机试验	c c c				GB/T 3142 SH/T 0189
最大无卡咬负荷Pb值 / N					
磨斑直径 (1200r/min, 294N, 30min, 常温) / mm					
FZG齿轮机试验	c				SH/T 0306

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.

03

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

05

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

02

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

04

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

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			