

Hydraulic retarder oil

● Performance Overview

Maxtop hydraulic retarder oil is used as the working medium in the vehicle automatic transmission, which transmits energy through the kinetic energy of the liquid. Hydraulic transmission oil has the following characteristics: suitable viscosity, good viscous-temperature properties, anti-wear, thermal stability and anti-oxidation stability, low temperature fluidity and anti-foam. Under frequent braking conditions, the kinetic energy of the engine is efficiently transferred to the working chamber of the retarder, and the kinetic energy of the vehicle is converted into heat energy and discharged through the cooling system to avoid overheating of the brake system. Full synthetic PAO base oil and special additives, high temperature oxidation resistance.

● Features

01

Suitable viscosity and good viscosity-temperature performance.

02

Good wear resistance.

03

Good thermal stability and antioxidant stability.

04

Good low temperature fluidity.

05

Reduce brake dust emissions by more than 80%, and some models can save 0.1-0.3L of fuel per 100 km, which is in line with the trend of low-carbon transportation.

06

Good anti-foaming properties.



● Application Scenario

1: Heavy commercial vehicles

Long downhill sections: When the mountain road continues to brake, it replaces the water spraying device to avoid the risk of brake pad heat decay and tire high temperature puncture.

Urban working conditions: Reduce brake pad wear and reduce maintenance costs in frequent start-stop scenarios.

High-speed cruise: auxiliary engine braking, improve driving safety and comfort.

2: Engineering vehicle

Mining cars, excavators and other special vehicles in high-load operation, provide stable brake assistance, extend the life of the brake system.

3: Demand for environmental protection upgrading

Meet the demand for low emission and slow speed solutions for National six emission standard vehicles to reduce brake dust pollution.

Hydraulic retarder oil performance indicators

Project		Quality indicators	
level		MT-30A	MT-40A
Appearance		Clear and transparent	Clear and transparent
Kinematic viscosity (100°C)/mm ² s		9.3~<12.5	12.5~<16.3
Low temperature dynamic viscosity/mPa.s not more than		7000(-25°C)	7000(-25°C)
High temperature and high shear viscosity/mPa.s not more than		2.9	2.9
Evaporation loss/% not more than		15	15
Noack method (250°C, 1h)			
Flash point (open), °C not less than		205	205
Pour point, °C not higher than		-30	-30
Moisture, % not more than		trace	trace
Mechanical impurities, % not more than		0.01	0.01
Foam properties (tendency/stability)/(ml/ml)			
Program I (24°C) No more than		10/0	10/0
Procedure II (93.5°C) No more than		50/0	50/0
Procedure III (after 24°C) No more than		10/0	10/0

