

Synthetic refrigeration compressor oil

● Performance Overview

Maxtop MTSH-5 and MTSH-8 synthetic refrigeration compressor oil is a kind of low viscosity, energy saving and environmental protection refrigeration compressor oil. It is a special synthetic oil as the base oil, and add lubrication additives, stabilizers, preservatives and other additives prepared. MTSH-5 and MTSH-8 synthetic refrigeration compressor oil has excellent miscibility with R600A or R290 refrigerant, excellent lubricity and thermochemical stability, has a very low freezing point and excellent low temperature fluidity, has a high electrical insulation and good compatibility with various materials. It is especially suitable for use as synthetic refrigerated compressor oil in refrigerators, freezers and freezers with R600A and R290 as refrigerants.

● Features

01

Synthetic base oil and compound additive formula: Special synthetic oil is used as the base oil, and additives such as extreme pressure, antioxidant and corrosion resistance are added to ensure lubricity and chemical stability under high temperature and pressure.

02

Excellent refrigerant miscibility and thermochemical stability: highly miscible with R600A, R290 and other environmentally friendly refrigerants to avoid system efficiency reduction caused by oil film separation.

03

Excellent low temperature performance: very low freezing point (such as below -50°C) and low temperature fluidity, adapt to cold environment, reduce cold start wear.

04

Environmental protection and energy saving features: Low viscosity design reduces friction energy consumption and improves energy efficiency of refrigeration system.



● Application Scenario

- 1: Household and commercial refrigeration equipment: suitable for refrigerators, freezers, frozen display cabinets and other fully closed systems with R600A and R290 as refrigerants.
- 2: Low temperature cold storage and cold chain equipment: meet the needs of compressor lubrication in low temperature environment below -30°C .
- 3: Environmentally friendly refrigeration system: suitable for new natural refrigerants (such as hydrocarbons), in line with the trend of low-carbon environmental protection.

Performance index of synthetic refrigeration compressor oil

Project	Quality indicators			
Brand	MTSH-5	MTSH-8	MTSH-10	MTSH-15
Appearance	Transparent liquid			
Colour	Golden yellow			
Density (20°C), kg/m ³	0.8670	0.870	0.882	0.887
Kinematic viscosity (40°C), mm ² /s	5.83	8.20	9.5	14.8
Kinematic viscosity (100°C), mm ² /s	1.78	2.03	2.23	2.92
Flash point (opening), °C	151	154	156	159
Freezing point, °C	<-60	<-58	<-48	<-48
Flocculation point, °C	<-60	<-58	<-48	<-48
Water (ppm)	13			
Acid value, mg (KOH) /g	0.01			
Corrosion test (copper sheet, 100°C, 3h), grade	1a			
Insulation strength (KW)	60			

Chemical composition

Test method	CAS number	Concentration (%)
Dodecyl benzene	123-01-3	40.0-80.0
Mixed alkyl benzene	-	20.0-60.0
Tricresol phosphate	1330-78-5	1.0-3.0

