



Ester based PAO for High Viscosity Performance GP15, GP25, GP35, GP45, GP50

Description

Goncord ester-based PAO series is a fully synthetic lubricant base oil with a unique molecular structure that combines ester groups and polyalphaolefin (PAO) copolymers. It offers excellent additive solubility, significantly reducing friction and wear, and prevent foam formation while controlling oil deposit buildup.

Over a wide temperature range, Goncord ester-based PAO can form a high-strength oil film on different material surfaces. Providing longer lubrication time and achieve excellent lubrication effect, thereby extending the service life of equipment.

Features

1. Improve lubricant performance, providing formulators with more flexibility in balancing additives, increasing boundary lubrication, and improving oil film thickness
2. Reduce friction and wear
3. Excellent low temperature performance
4. Improved shear stability
5. Extremely high thermal oxidation stability
6. Provides additive solubility
7. Higher viscosity index
8. Elastomer seal compatibility
9. Excellent lubrication and anti-micro pitting capability

Application

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|--------------------------|--------------------------------|
| 1. Industrial lubricants | 7. Metalworking fluids |
| 2. Automotive lubricants | 8. High temperature chain oils |
| 3. Gear oils | 9. Cable oils |
| 4. Food grade lubricants | 10. Hydraulic oils |
| 5. Transmission oils | 11. Greases |
| 6. Compressor oils | |

Combustion cleanliness, low volatility

Goncord ester-based PAO series does not generate smoke, dangerous gases, or carbon residues when burned or evaporated at high temperatures. Therefore, it can be used to formulate low-smoke and environmentally friendly two-stroke engine oils or industrial gear oils. While Goncord ester-based PAO exhibits neutral to slightly swelling effects on common sealing materials when used alone, blending it with PAO or Group III base oils eliminates the need for additional ester seal swelling agents.

Typical Properties

Property	GP15	GP25	GP35	GP45	GP50
Appearance	Colourless, clear	Colourless, clear	Colourless, clear	Colourless, clear	Colourless, clear
Visc. @40°C, mm ² /s	112.75	224.52	331.8	423.6	551.4
Visc. @100°C, mm ² /s	16.2	25.69	35.5	42.04	49.89
Viscosity Index	155	145	153	151	149
Flash point, °C	254	260	270	272	278
Pour point, °C	-48	-30	-40	-34	-32
Acid value, mgKOH/g	0.04	0.063	0.05	0.08	0.16
Density @20°C, kg/m ³	0.93	0.96	0.96	0.93	0.95
NOACK Volatility @ 250°C/1hr, %W/W	2.0	1.8	1.1	2.1	2.05