



PMA Viscosity Index Improver G6800V

In lubricant formulation, PMA viscosity index improvers are commonly used due to their numerous advantages and functionalities. Goncord PMA viscosity index improvers boast a highly flexible polymethacrylate structure, which effectively optimizes the viscosity index of oils. This delivers excellent low-temperature performance and shear stability. Additionally, Goncord's PMA improvers demonstrate good compatibility with additive packages, which further enhance low-temperature performance when combined with base oil.

Description

G6800V is a synthetic polymethacrylate (PMA) multifunctional viscosity index improver that maintains the superior adhesion of polar base oils to metal surfaces, ensuring the integrity of the lubricant film even under high loads. It possesses high antioxidant properties and exceptional chemical stability, exhibiting excellent solubility in various mineral and synthetic oils. The unique polymerization structure also provides outstanding resistance to breakdown under high shearing forces.

Features

- **Anti-wear properties:** Effectively protects metal surfaces from wear and tear, extending component lifespan.
- **Exceptional stability:** Withstands harsh operating conditions, including high temperatures and oxidation, ensuring consistent performance.
- **Improved flow properties:** Enhances lubricant flow at low temperatures, optimizing lubrication even in cold starts.
- **Viscosity index improvement:** Maintains optimal viscosity across low temperature range, ensuring consistent lubrication performance.
- **High solubility:** Readily blends with non-polar lubricants, including fully synthetic oils, for versatile application.
- **Multifunctional performance:** Provides dispersing, detergency, and pour point depression properties, enhancing overall lubricant performance.

Applications

This versatile additive is ideal for a wide range of applications, including:

- Internal combustion engines
- Gearboxes
- Clutches and pumps.

Typical Properties

Application of G6800V on Multi-Grade Engine Oil

5W-30		0W-20		
G6800V, wt %	4.5	G6800V, wt %	6.00	4.20
GF-5 Functional Agent, wt%	10	GF-5 Functional Agent, wt%	8.90	8.90
Group III Base Oil, wt %	85.5	Group III Base Oil, wt %	85.10	86.90
Viscosity @100°C, mm ² /s	9.8	Viscosity @100°C, mm ² /s	7.4	8.3
Viscosity @40°C, mm ² /s	43.75	Viscosity @40°C, mm ² /s	30	35.8
Viscosity Index	220	Viscosity Index	228	220
HTHS @150°C, mPa.s	2.9	HTHS @150°C, mPa.s	2.6	2.65
HTHS @100°C, mPa.s	6.2	HTHS @100°C, mPa.s	5.1	5.3
HTHS @80°C, mPa.s	9.3	HTHS @80°C, mPa.s	7.5	7.8
CCS @-30°C (5W), mPa.s	4150	CCS @-35°C (0W), mPa.s	4600	4650
Evaporation loss, %	11	Evaporation loss, %	11.5	10.5
PSSI	6.5	PSSI	6.1	6.6