

FUNCTIONAL V-159 VISCOSITY INDEX IMPROVER

APPLICATION:

FUNCTIONAL V-159 is a viscosity index (V.I.) improver that may be used in preparing multi-grade engine oils, as well as industrial fluids and lubricants. It may also be used without dilution as a supplemental crankcase additive for the automotive aftermarket.

COMPOSITION:

The active thickener in **FUNCTIONAL V-159** is a copolymer of ethylene and propylene that has been used as a V.I. improver by major oil companies. The diluent in **FUNCTIONAL V-159** is a light paraffinic mineral oil.

| Typical Properties | |
|---|--------------------------|
| Specific Gravity | 0.87 |
| Lbs per Gallon | 7.25 |
| Flash Point | 175°C (350°F) |
| Kinematic Viscosity | 500 cSt at 100°C |
| Color | yellow (1 - 2 ASTM) |
| Thickening efficiency (17.5% in ISO 32 paraffinic base oil) | 12.5 - 15.5 cSt at 100°C |
| Shear Stability (10-hr L-38 test, MIL-L-46152) | 13% thickening loss |
| Shear Stability (ASTM D 3945 A, substantially identical to DIN 51382) | 28% thickening loss |

TREATMENT LEVEL:

Treatment levels from 5 - 20% are typical in industrial lubricants and greases. Please refer to the application bulletins for more information.

HANDLING:

Due to the viscosity of **FUNCTIONAL V-159**, elevated temperature (up to approximately 90°C or 200°F) can facilitate handling but is usually not necessary. Safe handling precautions are the same as those to be taken with the base oil; see the current MSDS.

This Technical Data Sheet and the Material Safety Data Sheet contain information believed to be accurate and reliable. No warranty is made, however, to information beyond the control of FUNCTIONAL PRODUCTS INC. The engineering and management personnel of the user are responsible for determining the suitability of this or any product for any specific application, and this information is offered to them for that purpose.

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