

### FUNCTIONAL PD-55 I

#### COLD-FLOW IMPROVER for VEGETABLE-OIL-BASED LUBRICANTS

#### APPLICATION:

**FUNCTIONAL PD-55 I** is a wax-crystal modifier. Its primary use is in improving the cold-flow properties of vegetable-oil-based lubricants at temperatures below their cloud points. It is effective under both rapid-cooling conditions and extended cold storage conditions. **FUNCTIONAL PD-55 I** is effective in hydraulic fluids, chain saw oils, pneumatic-tool lubricants and other lubricants made from canola oil, sunflower oil or other tri-glycerides.

#### COMPOSITION:

The active additive in **FUNCTIONAL PD-55 I** is a proprietary copolymer. The diluent oil in **FUNCTIONAL PD-55 I** is a vegetable oil; it contains no petroleum oil. Due to the large percentage of biodegradable diluent, **FUNCTIONAL PD-55 I** is classified as readily biodegradable.

Typical properties	
Appearance	light-colored liquid
Odor	mild fatty
Specific Gravity	0.93
Lbs per Gallon	7.75
Flash Point	160°C (320°F), min.
Kinematic Viscosity	200 cSt at 100°C, 1200 cSt at 40°C
Biodegradability	approx. 90% readily biodegradable

#### TREATMENT LEVEL:

To reduce the pour point of canola or other low-saturate triglyceride oil to below -10°F, a treatment of 0.1% is usually sufficient. For stability in extended storage at -10°F, 0.2-0.5% is usually necessary. Since the responsiveness of triglyceride to wax-crystal modifiers is extremely variable and may be dependent on the cooling history, the user best determines the best treatment level.

#### HANDLING:

Due to the viscosity of **FUNCTIONAL PD-55 I** it should be stored indoors in the winter months. Any convenient technique may be used for blending. Safe handling precautions are the same as those to be taken with vegetable oils; see the current Material Safety Data Sheet.

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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