

FUNCTIONAL PD-571

High Viscosity Cold Flow Improver and PPD for Biobased

APPLICATION:

FUNCTIONAL PD-571 is a polymer-based cold flow improver and PPD similar to polymethacrylate cold flow improvers **FUNCTIONAL PD-585** and **FUNCTIONAL PD-590**. **FUNCTIONAL PD-571** is intended for making low temperature eco-friendly and environmentally acceptable lubricants.

FUNCTIONAL PD-571 contains no mineral oil or aromatic carbon.

COMPOSITION:

FUNCTIONAL PD-571 is a polymer diluted in ester.

Typical Properties	
Flash Point (ASTM D92, COC)	>200°C / 392°F
Specific Gravity	1.0 g/mL
Pounds Per Gallon	8.3 – 8.4
Color (ASTM D1500)	Red, ≤ 5.0
Typical Kinematic Viscosity (ASTM D445)	1100 cSt @ 40°C
Renewable Content, wt%	>90% Approx.

TREATMENT LEVEL:

0.5 or 1.0wt% **FUNCTIONAL PD-571** is recommended to reduce the pour point of vegetable and fatty triglyceride based oils. Treat rate and performance is comparable to polymethacrylate-based technology though typically 3°C warmer in pour point. Exact performance depends on the total formulation including viscosity modifiers, base stock, and additive packages.

Benchmarking Pour Point Performance of **FUNCTIONAL PD-571** vs. **PD-585** and **PD-590**

Treat Rate	Canola Oil		Soybean Oil	
	PD-571	PD-585 / PD-590	PD-571	PD-585 / PD-590
0.0wt%	-24°C	-24°C	-12°C	-12°C
0.5wt%	-30°C	-33°C	-18°C	-21°C
1.0wt%	-33°C *	-36°C	-21°C	-24°C

* >0.5% treat in canola or less unsaturated oils may cause some minor haze

HANDLING:

Store in a cool, dry place. Avoid freezing conditions. If frozen, heat drum to 100-140°F (40-60°C) to thaw before use. **FUNCTIONAL PD-571** is a non-hazardous material.

This Technical Data Sheet and the 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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