

FUNCTIONAL DP-200

Dropping Point Improver for Lithium 12-Hydroxystearate Grease

APPLICATION:

FUNCTIONAL DP-200 is a high performance additive designed for simple Lithium 12-hydroxystearate soap greases. The additive works by increasing the three dimensional association of soap fibers in the grease making it more resistant to flow at elevated temperatures. **FUNCTIONAL DP-200** is very effective at treat levels of 0.3% to 0.5% in the grease, significantly less than competitive products that require 1% to 5%. **FUNCTIONAL DP-200** is practically odorless so that it does not impart an adverse odor to your final grease product

COMPOSITION:

FUNCTIONAL DP-200 is proprietary and recommended for simple Lithium 12-hydroxystearate soap greases.

Typical Properties	
Appearance	Clear, colorless to light yellow liquid
Odor	Mild
Lbs per Gallon	8.5
Flash Point (COC)	360°F / 182°C
Phosphorous, %	11.2 – 12.0
Acid Value, mg KOH / g	330 - 390
Solubility in Water	Slightly dispersible

TREATMENT LEVEL:

FUNCTIONAL DP-200 is recommended at a treat level of 0.3% to 0.5% weight. The optimum treat level will depend on your particular grease. The recommended process is to incorporate the **FUNCTIONAL DP-200** into the grease before other performance additives are added. Using an appropriate mixer for grease, the **DP-200** should be mixed in at 90° - 100°C for 2 hours then follow the mixing conditions for adding additional performance additives. Allow the grease to cool before testing.

The following data was obtained using a formulation consisting of 0.5% **FUNCTIONAL DP-200** in comparison to a competitive product A at 3% in unadditized Lithium 12-hydroxystearate soap grease

Properties and Performance of FUNCTIONAL DP-200 vs. Competitor A			
	Unadditized Grease	0.5% FUNCTIONAL DP-200	3% Competitor A
Unworked Penetration	267	327	330
Dropping Point, °C	193	240	234
Odor imparted	--	None	Strong, musky
Color	Brown	Light Brown, Creamy	Brown

HANDLING:

FUNCTIONAL DP-200 is a skin and eye irritant, can cause burns, and should be handled with suitable personal protection preferably in a well-ventilated area. The product is a low viscosity liquid that does not require heating or cooling to transfer. The product should be stored indoors in a dry, cool area.

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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