

FUNCTIONAL V-207

POLYMER FOR GREASES (IN QUICK-DISSOLVING FLAKE)

APPLICATION:

FUNCTIONAL V-207 is rapidly dissolving flake polymer specifically designed for use in greases. Unlike pre-dissolved polymers, the absence of diluent oil permits complete formulating flexibility. Greases made with **FUNCTIONAL V-207** have better mechanical stability than those using polymers designed for applications such as motor oil.

COMPOSITION:

FUNCTIONAL V-207 is a copolymer based on ethylene and propylene. It is chemically different from motor oil VI improver polymers in its monomer content and physically distinguished by its fine particle size.

Typical Properties	
Appearance	White powder
Mooney Viscosity	15 - 30

TREATMENT LEVEL:

Typical treatment level of 0.5 – 2.0% is used in greases to confer water resistance and mechanical stability. See performance below:

	POLYMER TREAT LEVEL	ASTM- D4049 Water Spray Off	ASTM D 1831 60 Strokes & 10,000 Strokes	ASTM D 1831 60 & 100,000 Strokes	ASTM D-217 Roll Stability % Change	Dropping Point
BASE GREASE	0%	73%	-24	-34	11%	> 540° F
V-207	0.75%	18%	-6	-9	7.1%	> 516° F

	Water Spray-off (%)	Cone Penetration (¹ / ₁₀ mm)
Li Complex	52	314
+ 1wt% V-207	20	310
Ca Sulfonate	100	245
+ 1 wt% V-207	26	234

HANDLING:

FUNCTIONAL V-207 is resistant to caking and no particular precautions are needed in storage. Dissolving is best accomplished with continuous agitation at temperatures of at least 200°F (95°C). When used in greases, **FUNCTIONAL V-207** should be incorporated into the batch right after the addition of the cooling oil to allow sufficient time (1 -3 hrs depending on the batch size) and high enough temperature for dissolving. **FUNCTIONAL V-207** is non-hazardous material; see the current Safety Data Sheet.

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.

Issued: 7/22/2014

Functional Products, Inc. 8282 Bavaria Rd. Macedonia, Ohio 44056

Ph: 330.963.3060 Fax: 330.963.3322