

### FUNCTIONAL V-4055

#### HIGH VISCOSITY POLYOLEFIN RESIN FOR GREASE

##### APPLICATION:

**FUNCTIONAL V-4055** is a highly concentrated semi-crystalline polyolefin copolymer specially designed for synthetic or low color greases. **FUNCTIONAL V-4055** is a low cost replacement for mPAO to build base oil viscosity and its liquid form allows faster incorporation into grease than polybutenes or solid polymers. **FUNCTIONAL V-4055** improves water resistance, adhesion, and tack.

##### COMPOSITION:

**FUNCTIONAL V-4055** is mixture of shear stable semi-crystalline polyolefin and hydrocarbons.

Typical properties	
Specific Gravity	0.82 – 0.84
Lbs per Gallon	6.90 – 6.95
Flash Point (ASTM D92, Open Cup)	>130°C (266°F)
Typical Viscosity (ASTM D445)	900 - 1000 cSt @ 100°C 100,000 – 160,000 @ 40°C
Typical Viscosity Index (ASTM D2270)	105 - 120
Color	Opaque, White
Viscosity at 30wt% in oil, 40°C (ASTM D445)	320 cSt in PAO6

##### TREATMENT LEVEL:

Typical treatment level of 10 – 500% by weight is used in greases to confer water resistance and adhesion. The required concentration is best determined by formulator through experimentation by the user. **FUNCTIONAL V-4055** is typically added after the soapmaking stage while the grease is at 60-100°C (160-212°F). Allow 1 hour of mixing to ensure even distribution into the grease then cool and mill as normal.

**FUNCTIONAL V-4055** is hazy and will remain hazy when diluted in base oils without making grease. **FUNCTIONAL V-4055** is not recommended for making fluids or lubricants.

##### HANDLING:

Store at room temperature. Due to the high viscosity of **FUNCTIONAL V-4055**, pre-heating to about 150°F (65°C) prior to using can facilitate handling and pouring but temperatures over 200°F (95°C) should be avoided.

Safe handling precautions are same as the base oil; 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.

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