

### FUNCTIONAL V-4008A

#### LOW COLOR LIQUID REACTIVE GREASE POLYMER

##### APPLICATION:

**FUNCTIONAL V-4008A** is a multifunctional polymer diluted in oil for use in greases to improve water resistance and mechanical stability. Its liquid form allows quick incorporation into grease without a long dissolving process. It can be added to grease with cooling oil. **FUNCTIONAL V-4008A** improves water washout, mechanical stability, and consistency of soap-based greases.

**FUNCTIONAL V-4008A** improves on the color, oxidation, and added yield from **FUNCTIONAL V-4004A** which is based in naphthenic oil. **FUNCTIONAL V-4008A** is ideal for lightly colored or synthetic greases.

##### COMPOSITION:

**FUNCTIONAL V-4008A** is a grafted hydrocarbon polymer diluted in petroleum oil.

Typical properties	
Specific Gravity	0.85 – 0.87
Lbs per Gallon	7.15
Flash Point (ASTM D92, Open Cup)	>150°C (302°F)
Typical Viscosity (ASTM D445)	550 cSt @ 100°C 12,000 cSt @ 40°C
Color (ASTM D1500)	< 2.0 (slight yellow, some haze)

##### TREATMENT LEVEL:

Typical treatment level of 1.0 – 6.0% by weight is used in greases to confer water resistance and mechanical stability. 4.55wt% **FUNCTIONAL V-4008A** delivers 0.25wt% **FUNCTIONAL V-4028**.

The required concentration is best determined by formulator through experimentation by the user.

Product	Additive Color	WSO (D4049) <sup>1</sup>	NLGI # <sup>2</sup>	Roll Stab. (D1831) <sup>2</sup>
#2 Li Complex Base Grease	--	52%	2	36.1%
<i>Competitor</i>	White/Beige	25%	2.5	16.4%
<b>FUNCTIONAL V-4004A</b>	Orange	21%	2	11.5%
<b>FUNCTIONAL V-4008A</b>	Slight Yellow	20%	2.5	13.4%

<sup>1</sup> = @ 4.5wt%      <sup>2</sup> = @ 8.2wt%

##### HANDLING:

Due to the high viscosity of **FUNCTIONAL V-4008A**, elevated temperature about 150°F (65°C) 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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