

FUNCTIONAL V-508S

PELLET FORM THICKENER FOR ESTER LUBRICANTS AND GREASES

APPLICATION:

FUNCTIONAL V-508S is a solid viscosity modifier for a wide range of ester lubricants including vegetable oil, blown oils, and synthetic esters. **FUNCTIONAL V-508S** performs in both saturated and unsaturated ester base fluids as an economical and stable means of achieving higher viscosity. **FUNCTIONAL V-508S** is also compatible in water insoluble and oil soluble polyalkylene glycol (PAG) fluids.

FUNCTIONAL V-508F is a highly concentrated liquid form of **FUNCTIONAL V-508S** with HX-1 status in a synthetic ester for faster and more convenient blending.

COMPOSITION:

FUNCTIONAL V-508S is a proprietary copolymer in pellet form.

Typical Properties	
Appearance	Clear to white pellets
Thickening, 1wt% in Canola	13.9 cSt @ 100°C, 63 cSt @ 40°C
PSSI, ASTM D6278, 1wt% in Canola	29 SSI
Specific Gravity	1.00

TREATMENT LEVEL:

1 – 7wt% **FUNCTIONAL V-508S** is used to prepare ISO 46 – 680 fluids for hydraulics, rock drill, bar and chain, open gear, chain lubricants, and more. 8 – 13wt% **FUNCTIONAL V-508S** is used to prepare very high viscosity ISO 1000 – 4600 fluids for open gear mining oils, rock crushers, sugar mills, and grease.

FUNCTIONAL V-508S Treat Rates in Canola Oil (ISO 32-36)

ISO VG	46	68	100	150	220	320	460	680	1000	1500	2200	3200	4600
wt%	0.5	1.4	2.2	3.2	4.0	5.0	6.0	7.0	8.0	9.2	10.2	11.3	12.3

Greases gain consistency, adhesion, oil bleed reduction, and water resistance from **FUNCTIONAL V-508S** at 2wt% or higher. Vegetable-based grease development is recommended to begin with an ISO 2200 viscosity (10wt% **FUNCTIONAL V-508S** in vegetable oil) to minimize soap usage and provide sufficient consistency.

HANDLING:

FUNCTIONAL V-508S is resistant to caking and no particular precautions are needed in storage. Long-term storage at warm temperature may, however, necessitate regrinding. **FUNCTIONAL V-508S** is non-hazardous material; see the current Safety Data Sheet. Dissolving is best accomplished with continuous agitation at temperatures of at least 200°F to 240°F (95°C - 115°C) for 4-8 hours.

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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