FUNCTIONAL PRODUCTS INC.

Innovative Chemistry for Lubricants

Technical Data Sheet

FUNCTIONAL V-508A5

Versatile Thickener for Synthetic Ester Lubricants and Greases

APPLICATION:

FUNCTIONAL V-508A5 is a concentrated liquid viscosity modifier in synthetic diester base fluid used for a wide range of ester lubricants including synthetic polyol esters, diesters, and complex esters. **FUNCTIONAL V-508A5** performs in both saturated and unsaturated ester base fluids as an economical and stable means of achieving higher viscosity. **FUNCTIONAL V-508A5** is also compatible in water insoluble and oil soluble polyalkylene glycol (PAG) fluids.

FUNCTIONAL V-508A5 is listed on the Ecolabel LuSC list which meets VGP requirements.

COMPOSITION:

FUNCTIONAL V-508A5 is a polymer that is stable against shear, oxidation, and heat. The adipate base fluid possesses excellent oxidation resistance, low volatility, excellent low temperature fluidity, high additive solvency, good thermal stability, and low color.

Typical Properties			
Specific Gravity	0.92		
Lbs per Gallon 7.7			
Flash Point > 200°C (393°F)			
Kinematic Viscosity	7000 cSt at 100°C		
Color, D1500 < 1.0			
Shear Stability Index (PSSI), D6278	29		

TREATMENT LEVEL:

5wt% **FUNCTIONAL V-508A5** in Ditridecyl adipate is sufficient to prepare VI 200 ISO 46 hydraulic fluids.

	Viscosity at 40°C	Viscosity at 100°C	VI
DTDA	23.0	5.12	160
5% V-508A5	44.9	9.71	210

Treatment levels of 5% to 20% are typical in industrial lubricants and greases. The user should determine the compatibility and treatment level for the desired application.

HANDLING:

Storage at room temperature is recommended. Wear appropriate PPE. The products is a 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: 2020.10.12