

FUNCTIONAL HF-595

ADDITIVE PACKAGE FOR BIOBASED HYDRAULIC FLUIDS

APPLICATION:

FUNCTIONAL HF-595 is a light color, low odor additive package composed of 100% LuSC approved components. **FUNCTIONAL HF-595** can be used to formulate hydraulic fluids using synthetic esters or triglyceride oils as base fluids. **FUNCTIONAL HF-595** does not contain phosphorus, zinc or heavy metals. The package provides corrosion protection, extreme-pressure/anti-wear activity, and foam resistance. **FUNCTIONAL HF-595** is also compatible in groups I – III petroleum base oils.

COMPOSITION:

FUNCTIONAL HF-595 is a mixture of oxidation inhibitors, EP/antiwear agents, ferrous, and non-ferrous corrosion inhibitors.

Typical Properties	
Appearance	Clear liquid
Color, D1500	3.5
Lbs. per Gallon	8.26
Flash Point, COC	> 150°C (> 302°F)
Kinematic Viscosity, D445	145 cSt at 40°C
Calcium	0.19
Sulfur	11.7
2.2% HF-595 in high oleic soybean oil thickened to ISO 46 grade	
D974 Acid number	0.3
D4172 4-ball wear at 40 Kg, mm	0.6
D2783 4-ball EP Weld point, Kg	250
D1401 Demulsibility, 30 minutes	49/51/0
D130 Copper Corrosion	1b

TREAT LEVEL:

The recommended treat level of **FUNCTIONAL HF-595** is 2.2% by weight in a suitable base stock. V-521 is the recommended thickener for triglyceride base oils for optimum demulsibility performance. It is recommended that the user test **FUNCTIONAL HF-595** thoroughly in the intended base oil and application before use. Additional demulsifier and oxidation inhibitors may be required in certain base oils, which should be determined by the end user. An optional pour point depressant such as PD-590 is recommended for operating temperatures below -10°C

HANDLING:

FUNCTIONAL HF-595 is non-hazardous. Use normal safe procedures for handling and blending. Heating **FUNCTIONAL HF-595** to 100-140°F before blending is not required but may facilitate blending. Heating HF-595 above 150°F is not recommended. Review the current Safety Data Sheet before use.

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: 2019.08.06