

### FUNCTIONAL DM-500

#### Defoamer / Demulsifier Package for Biobased Hydraulic Fluids

#### APPLICATION:

**FUNCTIONAL DM-500** is a additive package that provides a concentrated blend of defoamer and demulsifier chemistries at an optimized ratio for biobased lubricants in vegetable oil or synthetic ester.

**FUNCTIONAL DM-500** is ideal for low viscosity ISO 22 – 100 fluids like hydraulic fluid with low amounts of viscosity modifier or tackifier. Use **FUNCTIONAL DM-500** with **FUNCTIONAL HF-595** in vegetable oil HF.

#### COMPOSITION:

**FUNCTIONAL DM-500** is a proprietary formulation of polymeric defoamers/demulsifiers in biobased fluid. **FUNCTIONAL DM-500** contains silicone.

Typical Properties	
Appearance	Clear Orange Liquid
Specific Gravity	0.86
Lbs per Gallon	7.2
Flash Point (COC)	137°C / 280°F
Kinematic Viscosity at 40°C	6 – 8 cSt
Color (D1500)	≤ 3.0
Biobased Content	50%
Biodegradability	Readily (60+%)

#### TREATMENT LEVEL:

Typical treat rate is 0.10 – 0.40wt% depending on base oil:

Suggested Treat by Application	
Biobased and Synthetic Esters	0.25wt%

Formulators should also test at one-half and twice the recommended (0.125% and 0.375%) to find the ideal treat rate for both demulsibility and defoaming.

#### HANDLING:

Store indoors at 20-40°C (68 - 104°F) for best stability.

**FUNCTIONAL DM-500** has low viscosity for convenient handling and fast addition to batches. Safe handling precautions are the same as those to be used with vegetable oils; 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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