

EnviroSafe V-46

Bio-Based, Fire Resistant Hydraulic Fluid

USDA CERTIFIED BIOBASED PRODUCT PRODUCT 57%

DESCRIPTION:

EnviroSafe V-46 is the latest addition to a line of hydraulic fluids designed for systems requiring readily biodegradable, nontoxic fluids. It can be used in industrial, marine and mobile service, including high-pressure systems, systems with servo valves, and all robotics. It is formulated from select, high-quality, high-VI vegetable oils and additives providing the properties required in hydraulic fluids while satisfying the stringent criteria for biodegradability and toxicity. **EnviroSafe V-46** provides the excellent anti-wear and film-strength characteristics necessary for hydraulic systems operating under moderate to severe conditions.

EnviroSafe V-46 is compatible with most commonly used elastomers of Buna-N, Viton[®], and EPR. Silicone rubber should be avoided. It is Factory Mutual approved as a fire resistant hydraulic fluid. **EnviroSafe V-46** is a USDA certified biobased product in the USDA BioPreferred[®] program.

PROPERTIES:

	Test Method	ESV46
Appearance		Clear, Green
Viscosity @ 0°C	ASTM D445	311.4 cSt
Viscosity @ 40°C	ASTM D445	40.0 cSt
Viscosity @ 100°C	ASTM D445	8.40 cSt
Viscosity Index	ASTM D2270	194
Pour Point	ASTM D97	-29 °C (-20 °F)
Density @ 15 °C	ASTM D4052	$0.950 \text{ g/cm}^3 (7.93 \text{ lbs/gal})$
Flash Point	ASTM D92	296 °C (566 °F)
Fire Point	ASTM D92	339 °C (643 °F)
Autoignition Temperature	ASTM E	416 °C (781 °F)
Total Acid Number	ASTM D664	0.12 mgKOH/g
Neutralization Number	ASTM D664	0.01 mgKOH/g
Biobased Determination	ASTM D6866B	57%
Rust Prevention (24h)	ASTM D665B	Pass
Oxidation Stability by Rotating Pressure Vessel	ASTM D2272	50.0 minimum
Resistivity @ 25 °C	ASTM D1169	43.6 giga ohm-cm
Four-Ball Wear	ASTM D4172	0.30 mm
Hydraulic Pump Wear Test	ASTM D7043	<5 mg

The information contained herein is correct to the best of our knowledge. The recommendations or suggestions contained in this bulletin are made without guarantee or representation as to results. We suggest that you evaluate these recommendations and suggestions in your own laboratory prior to use. Our responsibility for claims arising from breach of warranty, negligence, or otherwise is limited to the purchase price of the material. Freedom to use any patent owned by Tribo-Chem, Inc. or others is not to be inferred from any statement contained herein.