## PRODUCT INFORMATION A PRODUCT OF AMERICAN CHEMICAL TECHNOLOGIES, INC.



## EcoSafe<sup>®</sup> V-200

Bio-Based, Fire Resistant Hydraulic Fluid

## **DESCRIPTION:**



**EcoSafe**<sup>®</sup> V-200 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. **EcoSafe**<sup>®</sup> V-200 provides the excellent anti-wear and film-strength characteristics necessary for hydraulic systems operating under moderate to severe conditions.

**EcoSafe**<sup>®</sup> **V-200** is compatible with most commonly used elastomers of Buna-N, Viton<sup>®</sup>, and EPR. Silicone rubber should be avoided. It is Factory Mutual approved as a fire resistant hydraulic fluid. **EcoSafe**<sup>®</sup> **V-200** is a USDA certified biobased product in the USDA BioPreferred<sup>®</sup> program.

## PROPERTIES:

	Test Method	ESV200
Appearance		Clear, Green
Viscosity @ 40°C	ASTM D445	39.16 cSt
Viscosity @ 100°C	ASTM D445	8.37 cSt
Viscosity @ 100°F	ASTM D445	200 SUS
Viscosity @ 210°F	ASTM D445	54.2 SUS
Viscosity Index	ASTM D2270	198
Pour Point	ASTM D97	-29 °C (-20 °F)
Specific Gravity @ 25 °C	ASTM D1298	$0.94 \text{ g/cm}^3$
Flash Point	ASTM D92	291 °C (555 °F)
Fire Point	ASTM D92	318 °C (605 °F)
Autoignition Temperature		416 °C (781 °F)
Total Acid Number	ASTM D664	0.25 mgKOH/g
Biobased Determination	ASTM D6866B	57%
Rust Prevention (24h)	ASTM D665B	Pass
Oxidation Stability by Rotating Pressure Vessel	ASTM D2272	50.0 minimum
Foam Tendency/Stability, Sequence I/II/III	ASTM D892	450/0, 40/0, 370/0
Resistivity @ 25 °C	ASTM D1169	43.6 giga ohm-cm
Four-Ball Wear	ASTM D2266	0.38 mm
Hydraulic Pump Wear Test	ASTM D7043	<5 mg

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