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# PRODUCT INFORMATION

A PRODUCT OF AMERICAN CHEMICAL TECHNOLOGIES, INC.

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## FR WG 300-D

*ISO-68 Water-Glycol Fire Resistant Hydraulic Fluid*

### DESCRIPTION:

**FR WG 300-D** is a premium, water glycol, fire resistant hydraulic fluid that has superior lubricating properties and meets all requirements for a less hazardous fire resistant hydraulic fluid. In addition to its excellent fire resistant properties, **FR WG 300-D** contains a proper additive balance to impart the necessary lubricity, corrosion protection and overall performance demanded by today's high performance hydraulic systems. The increased performance which **FR WG 300-D** provides results in extended pump service life and reduced downtime along with lower maintenance costs.

*Additional bonus features include:* high viscosity index, low pour point, excellent heat transfer, anti-foam properties and complete compatibility with commonly used seals, hoses and metals. In addition, **FR WG 300-D** is completely compatible in all proportions with other reputable brands of water-glycol fluids.

### APPLICATIONS:

Fire resistant hydraulic fluids are preferred in a variety of industrial applications, and are required in many such as steel and aluminum mills, die casting, off-shore oil rigs, mining, military equipment and forging plants. Water-glycol fluids are not only fire resistant but also have a low order of toxicity in addition to excellent low temperature properties, good shear stability and resistance to oxidative and thermal degradation. Sludge and varnish formations are not a problem with **FR WG 300-D**.

**FR WG 300-D** is recommended for use in all types of hydraulic systems requiring a water-glycol, fire resistant hydraulic fluid. If you want to add **FR WG 300-D** to another water-glycol, please ask for the assistance of an American Chemical Technology sales representative regarding compatibility. Hydraulic systems that contain fluids other than water-glycol should be thoroughly flushed by a procedure which we can recommend. American Chemical Technologies representatives are trained and experienced in all aspects of conversion assistance.

### HANDLING:

We believe **FR WG 300-D** has a low degree of hazard when used as intended. As with all products of this type, we recommend that good hygiene practices be observed, including; (1) avoid prolonged skin contact, (2) provide adequate ventilation, (3) do not ingest; and that all OSHA standards pertaining to products of this type be observed.

# FR WG 300-D

## PROPERTIES:

	<b>Test Method</b>	<b>FR WG 300-D</b>
Appearance		Slightly Hazy, red fluid
Viscosity @ 100°F	ASTM D445	270-330 SUS
Viscosity Index	ASTM D2270	> 200
Pour Point, °F	ASTM D97	-40 °C (- 40 °F )
Specific Gravity @ 60 °F	ASTM D1298	1.06-1.10 g/cm <sup>3</sup>
Density @ 60 °F	ASTM D1298	8.90-9.05 lbs/gallon
Boiling Point		104 °C (220 °F )
Flash Point	ASTM D92	NONE
Fire Point	ASTM D92	NONE
Factory Mutual Fire Test Sequence	FM 6930	APPROVED
pH – neat	ASTM E70	9.35-9.75
Reserve Alkalinity	ASTM D1121	18.0-22.0 mL
Water Content	ASTM E203	38 ± 1%
Rust Prevention	ASTM D665	PASS
Four-Ball Wear	ASTM D2266	
40 kg, 1200 rpm, 1 hr. @ 167°F		0.55 mm
40 kg, 1800 rpm, 1 hr. @ 130°F		0.69 mm
Vickers 104C Vane Pump	ASTM D2882	
Total Wear, 100 hours		< 100 mg.
Vickers HP 25 V Intra-Vane	ASTM D2882 Modified	
Pressure:		2000 psi
Flow Rate		10 gpm
Test Sample		5 gallons
Filtration		10 micron
Fluid Temp.		66 °C (150°F )
Shaft RPM		1,200
Total Wear, 100 hours		<50mg.