PRODUCT *INFORMATION*

A PRODUCT OF AMERICAN CHEMICAL TECHNOLOGIES, INC.

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 which has superior lubricating properties and meets all requirements for a less hazardous fire resistant hydraulic fluid. In addition to its excellent fire resistant properties, this fluid 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 (for example: 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. Water-glycol fluids also have excellent low temperature properties, good shear stability, and are resistant 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 ACT 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.

TYPICAL PHYSICAL PROPERTIES:

TEST	ASTM METHOD	RESULT
Appearance		Slightly Hazy, red fluid
Viscosity @ 100°F	D-2161	270-330
Viscosity Index	D-2270	> 200
Pour Point, °F	D-97	- 40
Specific Gravity, 60/60°F	D-1298	1.06-1.10
Pounds per Gallon, 60°F		8.90-9.05
pH		9.35-9.75
Reserve Alkalinity		18.0-22.0
Boiling Point, °F		220
Flash & Fire Point	D-92	NONE
Factory Mutual Fire Test Sequence	FM 6930	APPROVED
Rust Prevention	D-665	PASS
Water Content, %	D-95	38 ± 1
WEAR TESTS:		
Shell Four Ball	D-2266	
40 kg, 1200 rpm, 1 hr. @ 167°F		
Scar Diameter, mm.		0.55
40 kg, 1800 rpm, 1 hr. @ 130°F		
Scar Diameter, mm.		0.69
HIGH PRESSURE PUMP TEST:		
Vickers 104C Vane Pump	D-2882	
Total Wear, 100 hours		< 50 mg.
Vickers High Performance 25 V Intra-Vane	D-2882 Modified	
Pressure:		2000 psi
Flow Rate		10 gpm
Test Sample		5 gallons
Filtration		10 micron
Fluid Temp.		150°F
Shaft RPM		1,200
Total Wear, 100 hours		**<50 mg.**

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