

ProGuard Altra Advantage FR Hydraulic Fluid

ProGuard Altra Advantage FR is a next-generation water glycol hydraulic fluid based on a patent-pending technology. It can be used in a wide variety of industrial hydraulic systems. It offers excellent fire protection under the most severe hazard conditions. It has been optimized with a new, high performance additive package to protect from corrosion in both vapor phase and in the liquid phase on most metals, and is morpholine-free.

The key benefit to **ProGuard** Altra Advantage FR is its outstanding shear stability compared to traditional water glycol fluids. This will reduce maintenance requirements for the fluid, as it will protect equipment for longer periods. This fluid exhibits excellent performance in the Vickers Vane pump test.

ProGuard Altra Advantage FR will perform in a variety of hydraulic pumps within rated conditions:

-Various OEM Vane Pumps	-Various OEM Gear Pumps	-Various OEM Piston Pumps			
Typical Characteristics:					
ProGuard Altra Advantage FR 46					
Product Code Number	11175				
Appearance	Red Liquid				
Viscosity, ASTM D-445					
cSt. At 40° C	44.8				
Viscosity Index	195				
Specific Gravity, ASTM D-1298	1.082				
Pour Point, ASTM D-97, °C	-50				
Reserve Alkalinity, to pH 5.5	160-180				
pH, ASTM D-70	9.5				
Vickers Vane Pump Test, ASTM D-7043					
mg weight loss of ring and vanes	10-15				
Copper Corrosion, ASTM D-130					
6 hours	1a				
24 hours	1b				
Foaming Characteristics, ASTM D-892					
Sequence I	10/0				
Sequence II	10/0				
Sequence III	10/0				
Rust Test, ASTM D-665	Pass				

Page 1

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12.20.2019



ProGuard Altra Advantage FR Hydraulic Fluid

ProGuard Altra Advantage FR is a water glycol based fire resistant hydraulic fluid, and may lose some water content over time to evaporation. Periodic measurements of the fluid should be performed with a refractometer to monitor the quality of the fluid and for adjustment by adding water if needed. All water additions should be performed using only distilled water. In cases where the measurement shows excessive water content, contact your sales representative for assistance in corrective action.

	Proguard Altra Advantage FR 46 Refractometer Reference Chart		
	% Brix	Viscosity @ 40°C	Water Adjustment to Return to Nominal Viscosity
NOMINAL MODERATE SEVERE	50	82.0 cSt	Add Water - 18%
	49	75.0 cSt	Add Water - 16%
	48	68.0 cSt	Add Water - 13%
	47	61.0 cSt	Add Water - 10%
	46	55.5 cSt	
	45	50.0 cSt	
	44	45.0 cSt	
ERA RE	43	42.5 cSt	
	42	38.0 cSt	
	41	34.0 cSt	
	40	30.0 cSt	- Excessive Water (10%) -
	39	<30.0 cSt	- Excessive Water (15%) -
	38	<30.0 cSt	- Excessive Water (18%) -

Page 2

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