



BARRIER FLUID FDA

BUFFER / BARRIER FLUID FOR MECHANICAL SEALS

BEYOND SYNTHETIC®

Barrier Fluid FDA is a pure, non-reactive, synthetic fluid that provides superior lubrication and cooling for double and tandem mechanical seals.

Barrier Fluid FDA provides very stable seal performance over an extremely wide temperature range, satisfying most seal service requirements. Barrier Fluid FDA is extremely clean and has excellent low temperature fluidity and heat transfer properties.

Barrier Fluid FDA is sanctioned under the FDA CFR Title 21 Sections 178.3620(a)(b); 172.878; 175.105; 172.200 and 210; 177.2260, 2600 and 2800; 178.3570 and 3910.

Barrier Fluid FDA is NSF certified for H1 service. Barrier Fluid FDA is essentially inert, allowing it to be used with most hydrocarbon gases and aqueous acids and bases.

Barrier Fluid FDA is an undyed product.

PERFORMANCE ADVANTAGES

Environmentally Safe

Royal Purple Barrier Fluids are not listed on the EPA's VHAP (volatile hazardous air pollutants) or VOC (volatile organic compounds) lists.

Sanctioned by the EPA, NSF

Barrier Fluid FDA is the first synthetic white oil sanctioned under the FDA's CFR Title 21 Sections 178.3620(a) & (b); 172.878; 175.105; 176.200. It is also sanctioned under 210; 177.2260 and 2800; and 178.3570 and 3910. Barrier Fluid FDA is NSF certified for H1 service.

Minimal Disposal Problems

Royal Purple Barrier Fluids can be recycled, burned or disposed the same as mineral oil.

Very Low Moisture Content

Royal Purple Barrier fluids have a low moisture content to prevent seal problems or catalyst poisoning where applicable.

Highest Purity

Barrier Fluid FDA contains no impurities such as sulfur, vanadium, amines, etc., that can be harmful or reactive to process fluids or poison the catalyst if it enters a process stream.

Extremely Clean

Barrier Fluid FDA has a typical ISO Cleanliness Grade 14/13/11, minimizing abrasive wear to seal faces and extending seal life.

Excellent Heat Transfer Properties

Royal Purple Barrier Fluids are 25 to 30 percent better than mineral oil to keep seals cool.

Excellent Low Temperature Fluidity

Royal Purple Barrier Fluids have excellent low temperature fluidity for cryogenic and cold weather service.



Uniform Molecular Size

The no light ends, plus excellent thermal stability of Royal Purple Barrier Fluids provide maximum protection against blistering of carbon seal faces caused by fluid volatility.

High Flash Point

Royal Purple Barrier Fluids have a high flash point for maximum safety.

Compatible with Most Fluids

Royal Purple Barrier Fluids can be mixed with mineral oils, PAOs and diester fluids but should not be mixed with glycol or silicone synthetics.

Wide Seal Compatibility Range

Royal Purple Barrier Fluids are compatible with Viton®, neoprene, Buna N (except high ACN), silicone, polyurethane ester, epichlorahydrin, polysulfide, ethlene / acrylic, polycrylate, flourosilicone, propylene oxide, chlorosulfonated polyethylene, chlorinated polyethylene, Kalrez®, Nordel®, fluoroelastomer, nitrile and others. It is not for use with EPDM or EPR elastomers. Victon®, Kalrez® and Nordel® are registered trademarks of E.I. DuPont.

		ISO GRADE				
Typical Properties*	Method	22	34	56	78	910
Density, lbs/gal	D4052	6.66	6.84	6.9	6.94	6.97
Viscosity	D445					
cSt @ 40°C		5.2	17	31	47	66
cSt @ 100°C		1.7	3.9	5.8	7.8	9.9
Viscosity Index	D2270	--	123	135	136	135
Flash Point, °F/°C	D92	330/166	445/229	465/241	505/263	530/278
Pour Point, °F/°C	D97	-81/-63	-85/-65	-38/-39	-38/-39	-71/-57
Initial Boiling Point, °F/°C	D-7500	567/297	637/336	720/382	847/453	810/432
Auto ignition, °F/°C	E-659	428/220	689/365	744/396	750/399	779/415
ISO Cleanliness Level	ISO 4406	14/13/11	14/13/11	14/13/11	14/13/11	14/13/11

**Properties are typical and may vary.*