



THE SYNTHETIC EXPERT

BARRIER FLUID® FDA

BUFFER/BARRIER FLUID FOR DOUBLE, DUAL & TANDEM MECHANICAL SEALS

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, epichlorohydrin, 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. Viton®, Kalrez® and Nordel® are registered trademarks of E.I. DuPont.

PRODUCT	cSt @40°C	cSt @100°C	VI	Flash Point °F / °C	Initial Boiling Point °F / °C	Pour Point °F / °C	ISO 4406*
Barrier Fluid FDA 22**	5.2	1.7	—	330 / 166	567 / 297	-70 / -57	14 / 13 / 11
Barrier Fluid FDA 34**	17	3.9	123	445 / 229	637 / 336	-85 / -65	14 / 13 / 11
Barrier Fluid FDA 56**	31	5.8	135	465 / 241	720 / 382	-39 / -39	14 / 13 / 11
Barrier Fluid FDA 78**	47	7.8	136	505 / 263	847 / 453	-31 / -35	14 / 13 / 11
Barrier Fluid FDA 910	66	9.9	135	530 / 277	810 / 432	-65 / -54	14 / 13 / 11

* Check with manufacturer regarding availability with 14/13/11 cleanliness. ** NSF Certified H1.

TO ORDER, CONTACT: ROYALPURPLEINDUSTRIAL@CALUMETSPECIALTY.COM

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