



CRYSTAL-PURE®

SYNTHETIC X GRADE COMPRESSOR LUBRICANT

Royal Purple's Crystal-Pure® "X" Grade lubricants are pure, inert, ash-less, and non-reactive making them an excellent choice for hyper compressors, and high/low pressure process gas compressors. Crystal-Pure® lubricants are insoluble in most process gases, resist dilution by process gases, and are safe for process catalysts. This provides extended lubricant useful life, and that extends the life of cylinders, rings and packing. The 1X, 2X grades meet Ingersoll-Rand viscosity requirements; 40X, 60X grades meet Cooper-Bessemer viscosity requirements. Crystal-Pure® can be used in compressor services requiring compliance with FDA regulations Title 21, CFR 121.2511; CFR 177.1430; CFR 178.3570; and CFR 178.3910. The 60X grade is NSF registered for H1 food grade service and ISO 21469 certified. Other grades of Crystal Pure meet requirements for NSF H1 and ISO 21469 without certification. Crystal Pure is an undyed product.



Nonfood Compounds
H1 Registered,
ISO 21469 Certified

PERFORMANCE ADVANTAGES

ENVIRONMENTALLY SAFE - Crystal-Pure® is not listed on the EPA's VHAP (volatile hazardous air pollutants)

HIGHEST PURITY - Contains no impurities such as sulfur, vanadium, amines, etc.; will not harm process fluids or catalysts

EXCELLENT THERMAL PROPERTIES - High thermal conductivity and heat capacitance help keep equipment running cool

OUTSTANDING LOW TEMPERATURE

FLUIDITY - Suitable year-round service, even in cold weather climates

EXCEPTIONALLY DRY - less than 70 ppm (< 0.007%) (by Karl Fischer method) at manufacture, and demulsifies readily from water

VERY LOW REACTIVITY - Extremely inert formula will not react with other hydrocarbon oils and esters, or with most process fluids



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TECHNICAL DATA

Property	Test Method	1X	2X	40X	60X
ISO Viscosity Grade	ISO 3448	68	100	150	320
Viscosity @ 40°C, cSt	ASTM D445	79	118	167	357
Viscosity @ 100°C, cSt	ASTM D445	12.3	15.1	18.4	30.7
Viscosity Index	ASTM D2270	157	133	123	120
Specific Gravity	ASTM D4052	0.839	0.846	0.851	0.861
Flash Point, °C (°F)	ASTM D92	243 (470)	261 (502)	257 (495)	248 (478)
Pour Point, °C (°F)	ASTM D97	-39 (-38)	-42 (-44)	-42 (-44)	-42 (-44)
Demulsibility	ASTM D1401	40/40/0 (5)	41/39/0 (5)	42/38/0 (10)	41/39/0 (10)
Foam Test, Seq. II	ASTM D892	0/0/0	0/0/0	0/0/0	0/0/0

2/25/2022