



Krytox 143AC, 143AD

Technical Specifications

Property	ASTM Test Method	Test Conditions	Units	143AZ	143AA	143AB	143AC	143AD
Average Molecular Weight	NMR			2060	2210	3800	5940	7480
Viscosity	ASTM D445	-32 °C (-25 °F)	cSt	7480	12,340	44,620	—	—
		0 °C (32 °F)		228	350	1070	3940	7500
		20 °C (68 °F)		60	88	240	800	1540
		38 °C (100 °F)		24.7	35	86	270	502
		40 °C (104 °F)		22.8	32	78	243	450
		99 °C (210 °F)		4.2	5.4	10.5	26	44
		100 °C (212 °F)		4.1	5.3	10.2	25.4	42.4
		204 °C (400 °F)		1.1	1.3	2.1	4.1	6.0
		260 °C (500 °F)		—	—	—	2.4	3.4
Viscosity Index	ASTM D2270			60	96	113	134	146
Pour Point	ASTM D97		°C	-55	-50	-40	-35	-30
			°F	-70	-60	-40	-30	-20
Distillation Range	ASTM D1160	53 Pa (0.4 torr)	°C	140/210	170/245	215/290	260/370	300/400+
			°F	285/410	340/475	420/555	500/700	570/750+
Oil Density		0 °C (32 °F)	g/mL	1.91	1.92	1.93	1.95	1.95
		100 °C (212 °F)		1.72	1.74	1.75	1.77	1.78
Vapor Pressure	Knudsen	38 °C (100 °F)	torr	4×10^{-4}	1×10^{-4}	5×10^{-6}	8×10^{-8}	6×10^{-9}
		260 °C (500 °F)	torr	1.5	0.8	3×10^{-2}	2×10^{-3}	3×10^{-1}
		38 °C (100 °F)	KPa	5×10^{-5}	1×10^{-5}	7×10^{-7}	1×10^{-8}	8×10^{-10}
		260 °C (500 °F)	KPa	0.2	0.1	4×10^{-3}	3×10^{-4}	4×10^{-5}
Volatility	ASTM D2595	149 °C (300 °F)	wt% loss	18	15	1.9	—	—
		204 °C (400 °F)	in 22 hr	—	—	17.3	<1	—
		260 °C (500 °F)		—	—	76.2	4	2
Estimated Useful Range			°C	-57-149	-51-177	-40-232	-34-288	-29-316
			°F	-70-300	-60-350	-40-450	-30-550	-20-600

Features & Benefits

- 143 series oils are clear, fluorinated synthetic oils that are inert, non-reactive, nonflammable, & safe in chemical & oxygen service
- engineered to withstand incredibly harsh environments experienced in orbital flights in the vacuum of space

Applications

- maintenance & repair • aerospace & aviation • oxygen devices