MIL-PRF-27617 G Type IV Grease Approval No. AFPET/PTPT 12-003

## **Product Information**

Krytox<sup>™</sup> FPG 028 is a smooth, buttery white grease. It has been specifically developed to operate over a wide temperature service range, -73 to 204 °C (-99 to 399 °F), to be resistant to hydrocarbon fuel and liquid oxygen, and to be used as a lubricant in aircraft, aerospace vehicles, and supporting equipment. It is a perfluoropolyether

(PFPE)-based grease thickened with a special high performance PTFE thickener, and has exceptional chemical and oxygen resistance. It is designed to operate under severe conditions, and can be used for bearings, gears, and as a lubricant for O-rings and elastomers.

## Properties of Krytox<sup>™</sup> FPG 028

CAGE No.: 7GFT8\*

Property	Analysis	Specification	Method
Penetration, Unworked	268	225 min.	ASTM D1403
Penetration, Worked	269	235-310	ASTM D1403
Max. Change in Worked Penetration	1	30	ASTM D1403
Corrosion on Copper	1b	2b max.	FTMS 5309
High Temperature Bearing Performance	1691 hr	500 min.	ASTM D3336
Evaporation, % after 22 hr at 204 °C (399 °F)	6.61	15.0 max.	ASTM D2595
0il Separation, 204 °C (399 °F)	14.25	20% max.	ASTM D6184
Anti-Wear, Scar Diameter mm (max.), 40 kg load 52100, 75 °C (167 °F) 52100, 204 °C (399 °F)	0.94 0.57	1.0 max. 1.3 max.	ASTM D2266 ASTM D2266
Extreme Pressure Weld, kg (min.)	>800	500 min.	ASTM D2596
Solubility in Fuel	0.1	20% max.	FTMS 5414
Resistance to Fuel	Pass	Pass	FTMS 5414
Resistance to Aqueous Solutions	Pass	Pass	FTMS 5415
Film Stability and Corrosion on Steel	Pass	Pass	PRF 27617, 4.4.4
Liquid Oxygen Impact Sensitivity	O reactions/20 impacts	No reaction	ASTM D2512
Low Temperature Torque, g-cm at -62 °C (-80 °F) (max.)	Start 533, Run 121	Start 800, Run 300	ASTM D1478
Low Temperature Torque, g-cm at -73 °C (-99 °F) (max.)	Start 1524, Run 364	Start 2800, Run 800	ASTM D1478
Dirt Count 25–74 Micron Over 75 Micron Diameter	45/cc 0	1000 max. 0	FTMS 3005 FTMS 3005
Additional Data			
Pour Point	<-69 °C (-92 °F)	_	ASTM D97
Water Washout, % at 38 °C (100 °F)	0.32	_	ASTM D1264
Oil Viscosity at 40 °C (104 °F), cSt	50.45	_	ASTM D445

\*Code for Mil-Spec



## Storage and Handling

Does not oxidize or degrade from atmospheric contact. Life of uncontaminated product in reclosed container is undiminished. Indefinite shelf life in unopened container.

It is normal for oil to separate from grease during storage. Before use, knead tubes or stir larger containers to remix.

## **Product Package**

Krytox™ FPG 028 is available in 50 and 100 g syringes, 8 oz tubes, and 1.76 lb cartridges.



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For product information, industry applications, technical assistance, or global distributor contacts, visit krytox.com or within the U.S. and Canada, call 1-844-773-CHEM/2436 or outside of the U.S., call 1-302-773-1000.

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