

TECHNICAL REPORT PF20-80 BLACK HIGH TEMPERATURE PERFLUOROELASTOMER COMPOUND

GENERAL PROPERTIES

Perfluorelastomer compounds offer excellent chemical resistance due to the presence of fully fluorinated monomers. The strong bonds between the carbon and fluorine atoms make the chemical structure extremely stable and resistant to a wide combination of chemicals, weather, and compression set. The PF20-80 compound is carbon black filled to offer good mechanical properties and excellent high temperature performance with a static operating temperature range of -22F to +600F. PF20-80 provides the best high temperature performance but is reduced chemical, amine or steam resistance over other perfluoroelastomer compounds.

ASTM Designation ORIGINAL PROPERTIES	ASTM D2000 SPECIFICATION	LABORATORY PROPERTY
Durometer, Shore A	75 +/- 5	78
Tensile, psi (MPa), Minimum	-	1673 (11.5)
Elongation, % Minimum	-	170
Modulus at 100%, Psi (Mpa)	-	996 (6.87)
COMPRESSION SET, 70 HRS @ 200 C (AST	ΓM D395, Method B)	_
Original Deflection, % Maximum	-	19.5
COMPRESSION SET, 70 HRS @ 250 C (AS	ΓM D395, Method B)	_
Original Deflection, % Maximum	-	24.5
COMPRESSION SET, 70 HRS @ 300 C (AS	ΓM D395, Method B)	_
Original Deflection, % Maximum	-	32.4
Weight Loss in Direct Plasma (SF6+O2)		_
Etch Rate % per minute	-	.013
Weight Loss in Direct Plasma (CF4 +O2)		_
Etch Rate % per minute	-	.007
Weight Loss in Direct Plasma (O2)		_
Etch Rate % per minute	-	.008

MANUFACTURER'S CROSS REFERENCE

PF20-80 is designed to meet or exceed the properties of 4079 and 653