


Precision Polymer Engineering Ltd			
Material Data Sheet	Code	A70H	
	Designation	FEPM (TFE/P)	November 2005

MATERIAL TYPE: Tetrafluoroethylene/Propylene (TFE/P) Rubber, 70-75 °IRHD.
Copolymer of tetrafluoroethylene and propylene.
Formulated using Aflas® FA-100H. Aflas® is a registered trademark of Asahi Glass.

APPLICATION: Excellent resistance to oils, lubricants and sour oil and gas (H²S). Resistant to all types of hydraulic fluids (including alkyl-aryl phosphate esters), all brake fluids (glycol, mineral and silicone base), amine corrosion inhibitors and additive packages.

TEMPERATURE RANGE: Maximum temperature +250°C (482°F), Intermittent, short term up to +290°C (554°C).
Minimum temperature -25°C (-13°F) static (avoid shock loading), dynamic -5°C (23°F).

STORAGE RECOMMENDATION: Initial storage = 10 years, extended storage = 5 years.

TYPICAL PHYSICAL PROPERTIES:			
Property	Unit	Test Method	Typical Value
Hardness (points)	°IRHD	ASTM D 1415 (=ISO 48)	75
Tensile strength	MPa	ASTM D 412 (=ISO 37)	18.6
Elongation at break	%	ASTM D 412 (=ISO 37)	250
Compression Set, Method B;			
24 hours at 200°C (392°F)	%	ASTM D 395 (=ISO 815)	35
Heat Resistance;			
72 hours at 200°C (392°F)		ASTM D573 (=ISO 188)	
Hardness change (points)	°IRHD	ASTM D 1415 (=ISO 48)	+1
Tensile strength change	%	ASTM D 412 (=ISO 37)	-1.8
Elongation at break change	%	ASTM D 412 (=ISO 37)	+4
Low Temperature Resistance;			
TR10	°C	ASTM D1329 (=ISO 2921)	+2
Non-brittle after 3 mins. @	°C	ASTM D2137 (=ISO R812)	-5

HEALTH AND SAFETY DATA: No known hazard exists if used in accordance with the temperature range as quoted.

FIRE HAZARD: Ignition temperature >315°C(600°F).

Thermal decomposition will generate hydrogen fluoride, fluorinated hydrocarbons, carbon monoxide, carbonyl fluoride and fluorinated olefins. In the event of a fire, fire fighters must wear self-contained breathing apparatus and a protective suit. Extinguish with foam, carbon dioxide, and dry chemical or fine water spray. Neutralise refuse from a fire involving FEPM with calcium hydroxide solution and wear Neoprene® gloves before handling.

DISPOSAL: Must conform to national, state and/or local regulations. Landfill is recommended. Burning is not recommended, unless conducted by an approved/licensed incineration agency.

SPECIAL NOTE: This information is to the best of our knowledge accurate to the date indicated. However, PPE make no warranty, expressed or implied, that parts manufactured from this material will perform satisfactorily in the customer's application. It is the customer's responsibility to evaluate parts prior to use, especially in applications where their failure may result in injury and/or damage. It should also be noted that all elastomeric parts have a finite life, therefore a regular program of inspection and replacement is strongly recommended.

Precision Polymer Engineering Limited, Greenbank Road, Blackburn, Lancs, UK, BB1 3EA Telephone:+44 (0)1254 295400 • Fax:+44 (0)1254 680182 • www.prepol.com • E-mail support@prepol.com
--