

HEROMELT™ FP

FLUOROTHERMOPLASTICS

THE BENEFITS OF FLUORINATED POLYMERS WITH THE ADVANTAGE TO BE PROCESSED BY CONVENTIONAL EQUIPMENT COMMONLY USED FOR MELT PROCESSABLE RESINS



HEROFLON™
TECHNICAL FLUORINATED POLYMERS

Heromelt is the range of **fluorinated thermoplastic polymers** and their **compounds** that can be processed by melt extrusion, injection moulding and compression moulding. Heromelt FP Fluorothermoplastics (PFA, FEP, MFA and ETFE) are available as **virgin** polymers and as base polymers for **tailor-made compounds**. These products have a wide range of **technical and critical applications** such as "off-shore" sealing elements, pumps and valves for chemical plants, wire and cable coatings and many other precision components.

MAIN BENEFITS

- ✓ Non-aging characteristics
- ✓ Chemical inertness
- ✓ Outstanding dielectric properties
- ✓ Heat resistance
- ✓ Toughness and flexibility
- ✓ Low Coefficient of Friction
- ✓ Non-stick properties
- ✓ Very low flammability
- ✓ Extreme temperature resistance -200° +250°C
- ✓ Outstanding weather resistance

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TAILOR-MADE SOLUTIONS

AVAILABLE:

- DIFFERENT MELT FLOW RATES
- DIFFERENT REINFORCEMENT FILLERS & PIGMENTS
- CUSTOMIZED COMPOUNDS FORMULATIONS
- VIRGIN OR REQUALIFIED POLYMER BASE
- PELLETS AND POWDER FORM



TECHNICAL SUPPORT

- COMPLIANCY TO LATEST REGULATIONS (i.e.: RoHS, Reach, etc.)
- TECHNICAL CONSULTING FROM R&D TEAM FOR PERSONALIZED AND SPECIAL PROJECTS
- ASSISTANCE FOR ALL DEVELOPMENTAL STAGES: BEFORE, DURING AND AFTER THE ORDER

For more information, visit our website: www.heroflon.com

PRODUCT | PEOPLE, PASSION, INNOVATION.



PROPERTY	TEST METHOD	UNIT	FEP Fully-Fluorinated Perfluorinated Ethylene-Propylene	PFA Fully-Fluorinated PerFluoroAlcoxy	ETFE Partially Fluorinated Ethylene TetraFluoroEthylene
Specific Gravity	ASTM D4894	-	2,12 - 2,17	2,12 - 2,17	1,71 - 1,78
Max. Operating Temperature	-	°C	200 - 205	250 - 260	150 - 180
Flammability	-	-	Non Combustible	Non Combustible	Self-extinguishing
Tensile Strength @23°C	ISO527	MPa	20 - 25	27 - 32	36 - 40
Elongation at Break	ISO527	%	250 - 350	300	200 - 500
Tensile Modulus @23°C	ISO527	MPa	350 - 700	650	500 - 1200
Flexural Modulus	ASTM D790	MPa	660 - 680	650 - 700	1000 - 1500
Hardness	NEEDLE	Shore D	55 - 60	60 - 65	63 - 75
Coefficient of Friction	ISO7148	-	0,3 - 0,35	0,2 - 0,3	0,3 - 0,5
Melt Temperature	ASTM D4591	°C	255 - 265	300 - 310	265 - 275
Heat Deflection Temperature	ASTM D648	°C	51	-	71 - 74
Oxygen Index (L.O.I.)	D2863	%	> 95	> 95	30
Dielectric Dissipation Factor 103	ASTM D150	s	2,1	2,06 - 2,1	2,6
Surface Resistivity	INTERNAL	Ω	1016	1017	1014
Dielectric Strength	ISO 1286	KV/mm	50 - 80	50 - 80	60 - 90
MELT FLOW RATE	ASTM D1238	g/10min.	From 1 up to 32	1 - 32	4 - 45
FILLERS			AS: Anti-Static; SiC: Silicon Carbide; GL: Glass Fibres; Cond: Conductive; CF: Carbon Fibres; Pigments		
PROCESSING METHODS			Melt Extrusion Injection Moulding	Melt Extrusion Injection Moulding Compression Moulding Transfer Moulding	Melt Extrusion Injection Moulding Transfer Moulding
MAIN APPLICATIONS			Wire and cable coating	Technical components Piping for chemical fluids Pump and valve coating Wire coating High-flex film Plates Impact resistant coating	Coating for electrical cables Piping Gaskets Films and sheets Valves Precision and electronic components

These are Typical Values not suitable for specification purposes

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