Material Data Sheet

MC401 FEP

Aug-2022 Revision: 7

MATERIAL

FEP
ASTM D2116-02 Type IV

DESCRIPTION

FEP (Fluorinated Ethylene Propylene)
Fluoropolymer translucent virgin grade
FDA compliant 21 CFR 177.1550§ (a) (1) and (b) as finished articles & European regulations EC1935/2004
3-A Sanitary Standards for multiple-use plastic materials used as product contact surfaces for dairy equipment number 20-27
US Pharmacopeia (USP Class VI) at 121°C for one hour
Meets EN10/2011

APPLICATION

This material has excellent chemical inertness, heat resistance and low coefficient of friction.

TEMPERATURE

Low temperature service limit -418°F (-250°C)
Upper temperature continuous service limit +399°F (+204°C)

PRODUCTS

Jacket material for our Encapsulated Seals

PHYSICAL PROPERTIES

ORIGINAL	STANDARD	TYPICAL VALUES
Specific Gravity	ASTM D792	2.15
Hardness shore D (slab)	ASTM D2240	55
Elongation % (23°C)	ASTM D638	300
Tensile strength PSI (MPa) (Dumbbell)	ASTM D638	4350 (30)
Flexural Modulus PSI (MPa) (Dumbbell)	ASTM D790	95065 (655)
MIT folding endurance (0.18-0.20mm film)	ASTM D2176	80,000
THERMAL	**STANDARD**	**TYPICAL VALUES**
Melting point °F (°C)	D2116	490 (255)
Coefficient of linear thermal expansion (38 - 70°C)	D696	10^{-5}/K
ENVIRONMENTAL		
Water absorption % 24 hours	D570	<0.01
Weathing		Excellent

An INTEGRATED POLYMER SOLUTIONS Company

Northern Engineering (Sheffield) Limited, Haigh Moor Drive, Brooklands Park, Sheffield, UK, S25 2JY
Tel: +44 (0) 1909 560 203
Fax: +44 (0) 1909 560 184
Email: sales@nes-ips.com
Web: www.nes-ips.com