

Teflon® - FEP

PRODUCT SPECIFICATIONS



Teflon® FEP is a powder coating, flat black, that represents a new level of technology. This powder coating combines fluropolymers and other resins homogeneously, such that each individual particle contains the proper blend of ingredients.

Teflon® FEP has superior toughness, coupled with properties from other liquid Teflon-S® coatings : excellent corrosion resistance and good dry lubrication properties.

Additional Information:

Recommended Services:

- CO₂ (WAG) environments
- Oil / water / gas production
- Salt water disposal (SWD)
- Flow lines fittings
- Valves, ESP stages

Benefits:

- Excellent flexibility
- Excellent corrosion resistance
- Superior toughness
- Excellent adhesion

Characteristics:

- Color: Matt Black
- Generic type: FEP
- Primer: None
- Operating temperatures: 300°F (148°C)
- Thickness: 3-5 dry mils



Typical Engineering Properties

Property	ASTM Method	Unit	Teflon® FEP
Non-Stick	none	---	Excellent
Abrasion Resistance	none	---	Good
Chemical Resistance	none	---	Excellent
Max Use Temperature		°F	300
Continuous		°C	150
Intermittent		°F	350
		°C	177
Melting Point	D3418	°F	500
		°C	260
Specific Gravity	D792		2.15
		Static	.12 - .20
Coefficient of Friction	D1894	Dynamic	.08 - .30
Hardness	D2240	Shore D	56
Tensile Strength	D638	Mpa	23
Elongation	D638	%	325
Flexural Modulus	D790	Mpa	600
Thermal Conductivity		see note 1	1.4
Dielectric Strength	D149	V/μm	53
Dielectric Constant	D150	1 MHz	2.1
Arc Resistance	D495	sec	>300
Volume Resistivity	D257	ohm·cm	>10 ¹⁸
Surface Resistivity	D257	ohm/sq.	>10 ¹⁶
Weather Resistance	Florida Exposure	years unaffected	20
Water Absorption	D570	%	<.01
Contact Angle		water °	95-105

note 1: thermal conductivity units = (BTU)(in) / (ft²)(hr)(deg F)

*These test results are presented as simulated conditions and should be used as guidelines only; they are not intended for warranty serviceability.