

# FEP

## WIRE INSULATIONS AND COATINGS

### DATASHEET

FEP coating is thin film applications of fluorinated ethylene propylene available in a variety of film thickness and colors. The following values are typical of the fluoropolymer and should not be used as a specification.

#### ELECTRICAL PROPERTIES

Property	ASTM standard	Unit	Value
Dielectric constant	D150	MHz	2.1
Dielectric strength	D149	V/m	53
Dissipation factor	D150	MHz	0.0006
Arc resistance	D495	s	300
Volume resistivity	D257	$\Omega$ cm	$> 10^{18}$
Surface resistivity	D257	$\Omega$ /sq	$> 10^{16}$

#### MECHANICAL PROPERTIES

Property	ASTM standard	Unit	Value
Specific gravity	D792		2.15
Tensile strength	D1457 D1708	MPa (psi)	23 (3.400)
Hardness	D2240	Shore D pencil	56 HB
Coefficient of friction Static	D1894	-	0.2

#### PHYSICAL PROPERTIES

Property	ASTM standard	Unit	Value
Melting point	D3418	$^{\circ}$ C ( $^{\circ}$ F)	260 (500)
Max. operating temperature			
Continuous		$^{\circ}$ C ( $^{\circ}$ F)	204 (400)
Intermittent		$^{\circ}$ C ( $^{\circ}$ F)	232 (500)
Thermal conductivity		Bt in / (h ft <sup>2</sup> $^{\circ}$ F) W/ (m K)	1.4 0.20

**Disclaimer:** Recommendations are for guidance only, and the suitability of a material for a specific application can be confirmed only when we know the actual service conditions. Continuous development may necessitate changes in technical data without notice. This datasheet is only valid for Sandvik materials.

