

## Daikin NEOFロン RP-4020 EFEP Pellets

Category : Polymer , Thermoplastic , Fluoropolymer , ETFE/ECTFE , Modified ETFE, Unreinforced , FEP

### Material Notes:

NEOFロン EFEP is an ETFE based fluoropolymer combining the excellent physical properties derived from ETFE together with a low processing temperature that is more compatible with conventional thermoplastic polymers. NEOFロン EFEP resins adhere well to many kinds of plastics (nylons, EVOH, modified PE, ETFE) and inorganic materials (glass, metals) without adhesive or etching. These resins have a very high transparency and are suitable for extrusion and co-extrusion, injection molding and blow molding applications. Processing Methods: Extrusion, injection molding. Applications: Transparent tubing, films, valve components, filter housings, etc. Information provided by Daikin Industries.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Daikin-NEOFロン-RP-4020-EFEP-Pellets.php](http://www.lookpolymers.com/polymer_Daikin-NEOFロン-RP-4020-EFEP-Pellets.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.74 g/cc	1.74 g/cc	at 25°C
Water Absorption	<= 0.10 % @Thickness 8.50 mm, Time 86400 sec	<= 0.10 % @Thickness 0.335 in, Time 24.0 hour	ASTM D570
Oxygen Transmission	70.0 cc-mm/m <sup>2</sup> -24hr-atm	178 cc-mil/100 in <sup>2</sup> -24hr-atm	at 25°C
Nitrogen Transmission	20.0 cc-mm/m <sup>2</sup> -24hr-atm	50.8 cc-mil/100 in <sup>2</sup> -24hr-atm	at 25°C
Viscosity	1.00e+6 - 1.00e+7 cP @Temperature 300 - 330 °C	1.00e+6 - 1.00e+7 cP @Temperature 572 - 626 °F	Melt viscosity
Linear Mold Shrinkage	0.030 - 0.040 cm/cm	0.030 - 0.040 in/in	
Melt Flow	25 - 50 g/10 min	25 - 50 g/10 min	
Deformation	2.3 %	2.3 %	13.7 MPa load, at 25°C, 24 hrs; ASTM D621
	5.4 %	5.4 %	6.7 MPa load, at 100°C, 24 hrs; ASTM D621

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	75	75	
Tensile Strength at Break	40.0 - 50.0 MPa	5800 - 7250 psi	ASTM D638
Elongation at Break	420 - 460 %	420 - 460 %	ASTM D638
Tensile Modulus	0.490 - 0.784 GPa	71.1 - 114 ksi	ASTM D638

Mechanical Properties	Metric	English	Comments
Compressive Strength	11.0 MPa	1600 psi	1% deformation; ASTM D695
	@Temperature 25.0 °C	@Temperature 77.0 °F	
Izod Impact, Unnotched	NB	NB	ASTM D256
Coefficient of Friction	0.055 - 0.078	0.055 - 0.078	
Coefficient of Friction, Static	0.060	0.060	Coated-steel surface
Taber Abrasion, mg/1000 Cycles	<= 139.2	<= 139.2	9.8 N load, cs-10 wheel

Thermal Properties	Metric	English	Comments
CTE, linear	50.0 - 90.0 µm/m-°C	27.8 - 50.0 µin/in-°F	ASTM D696
	@Temperature 23.0 - 60.0 °C	@Temperature 73.4 - 140 °F	
Thermal Conductivity	0.240 W/m-K	1.67 BTU-in/hr-ft <sup>2</sup> -°F	ASTM C177
Melting Point	160 °C	320 °F	
Maximum Service Temperature, Air	150 °C	302 °F	Continuous use
Flammability, UL94	V-0	V-0	
Oxygen Index	31 %	31 %	ASTM D2863

Optical Properties	Metric	English	Comments
Transmission, Visible	90 %	90 %	transparent; thickness not quantified

Electrical Properties	Metric	English	Comments
Volume Resistivity	<= 1.00e+16 ohm-cm	<= 1.00e+16 ohm-cm	ASTM D257
Dielectric Constant	2.6	2.6	ASTM D150
	@Frequency 1000 Hz	@Frequency 1000 Hz	
Dielectric Strength	16.0 kV/mm	406 kV/in	Short time; ASTM D149
	@Thickness 3.20 mm	@Thickness 0.126 in	
Dissipation Factor	0.00080	0.00080	ASTM D150
	@Frequency 1000 Hz	@Frequency 1000 Hz	

Electrical Properties	0.0050 Metric	0.0050 English	Comments
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	

Descriptive Properties	Value	Comments
Chemical Resistance	Excellent	
Contact Angle	96	Angle to level
Weatherability	Excellent	

## Contact Songhan Plastic Technology Co.,Ltd.

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