NEOFLON™ AP-201

Perfluoroalkoxy

DAIKIN AMERICA, INC.

Message:

NEOFLON PFA is a copolymer of tetrafluoroethylene and perfluoroalkyl vinyl ether, NEOFLON PFA is a compound of carbon atoms and fluorine atoms in which a perfluoroalkoxy radical is bonded to the carbon chain in the following molecular structure.
NEOFLON PFA has better mechanical strength at high temperatures than NEOFLON FEP, and has excellent moldability for easy of processing by extrusion, compression, blow, transfer, and injection molding methods. Due to the high bonding strength of the carbon, fluorine and oxygen atoms, NEOFLON PFA demonstrates nearly the same outstanding capabilities as PTFE in temperatures ranging -200°C ~+260°C. NEOFLON PFA has excellent transparency for use in melt-flow processing.

General Information	
Features	Copolymer
	Flame Retardant
	Good Corrosion Resistance
	Good Electrical Properties
	Good Moldability
	Good Weather Resistance
	High Clarity
	High Flow
	High Temperature Strength
	Low Friction
Uses	Thin-walled Parts
	Wire Jacketing
Appearance	Colors Available
	Translucent
Forms	Pellets
Processing Method	Extrusion
	Injection Molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity	2.14 to 2.16	g/cm³	ASTM D792
Apparent Density	1.00 to 1.40	g/cm³	JIS K6891
Melt Mass-Flow Rate (MFR) (372°C/5.0 kg)	20 to 30	g/10 min	ASTM D1238
Water Absorption (Saturation)	< 0.010	%	ASTM D570
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness (Shore D)	60 to 70		ASTM D2240
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength (Yield)	24.5 to 29.4	MPa	JIS K6891

Tensile Elongation (Break)	350 to 450	%	JIS K6891
Flexural Modulus	580 to 690	MPa	ASTM D790
Compressive Modulus	490 to 590	MPa	ASTM D695
Compressive Strength			ASTM D695
1% Strain	4.90 to 5.90	MPa	
25% Strain	31.4 to 33.3	MPa	
Coefficient of Friction (vs. Steel - Static)	0.040 to 0.050		
Deformation Under Load			ASTM D621
25°C, 14 MPa [1]	8.00 to 9.00	%	
25°C, 14 MPa [2]	2.50 to 3.00	%	
100°C, 6.9 MPa [3]	8.50 to 9.50	%	
100°C, 6.9 MPa [4]	2.00 to 3.00	%	
Flexural Strength	No break		ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact	No Break		ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**
Melting Temperature	300 to 310	°C	ASTM D4591
CLTE - Flow (20 to 100°C)	1.2E-4	cm/cm/°C	ASTM D696
Specific Heat	1050	J/kg/°C	
Thermal Conductivity	0.26	W/m/K	ASTM C177
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (1.57 mm)	V-0		UL 94
Oxygen Index (1.57 mm)	> 95	%	ASTM D2863
Fill Analysis	**Nominal Value**	**Unit**	
Melt Viscosity (380°C)	2.00E+6 to 2.50E+7	mPa·s	
NOTE			
1.	Total deformation		
2.	Compressive creep		
3.	Total deformation		
4.	Compressive creep		

Recommended distributors for this material

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