

NEOFLON™ AP-210

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 Temperature Strength | | |
| | Low Friction | | |
| Uses | Coating Applications | | |
| | 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/cm ³ | ASTM D792 |
| Apparent Density | 1.00 to 1.40 | g/cm ³ | JIS K6891 |
| Melt Mass-Flow Rate (MFR) (372°C/5.0 kg) | 10 to 17 | 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) | 25.4 to 30.4 | 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 | | |

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China



WECHAT