FTORPLAST™ FEP granulated

FLUORINATED ETHYLENE - PROPYLENE COPOLYMER
ASTM D2116-02, Type I, III, IV

CHEMICAL NAME: Fluorinated Ethylene-Propylene copolymer

SYNONYMS : Copolymer of TFE/tetrafluoroethylene and HFP/hexafluoropropylene, FEP, FEP fluorocarbon polymer, FEP resin, Perfluoroethylene-perfluoropropylene copolymer, Poly (hexafluoro-propylene - tetrafluoroethylene), Tetrafluoroethylene - hexafluoropropylene copolymer, Tetrafluoroethyleneperfluorpropylene

TRADE NAMES : Dyneon™ FEP (Dyneon LLC), F46 (Guangzhou Li Chang Fluoroplastics Ltd.), Fluororesin-46 (Zhejang Juhua Co.), Neoflon™ FEP (Daikin), Niflon FEP (Zhejiang Xingteng Chemical Co., Ltd.), Teflon ® FEP (DuPont)

STRUCTURAL FORMULA: $-[-(CF_2-CF_2)_n-(CF(CF_3)-CF_2)_m-]-$

CAS NO. 25067-11-2

H.S.CODE: 3904.69.9000

APPLICATIONS:

1. Suitable for melt extrusion as a primary insulation and jacketing material for wire and cable applications: coaxial cables for video security systems, electronic data cabling (LAN cables), down-hole cables, heating cables for making floors warm at home and for heating chemical columns, heat trace cables maintaining constant temperature on piping systems, heavy wire gauges, high temperature wires placed in back panel areas of electronic equipment (such as computers and business machines), plenum cables for construction purposes, small-gauge wires of twisted-pair construction (telephone and alarm systems), telecommunication cable jacketing
2. Extruded sheet, film and heat-shrinkable sleeving for applications as follows: gas sampling bags, film in solar collector covers, roll covers in pulp and paper industry, sensor probe covers, electrical terminals insulation, linings for chemical-processing tanks, hose protection, tubes for heat exchangers, medical tubing, wall-shrink tubes for printer/copier roller protection, thick wall-shrink tubes for textile roller protection, capillary tubes for medical liquid transfusion, tubes for pipage of all kinds of caustic and electronic liquids
3. Structural articles made by injection molding: fittings, valves

Upper / Lower service temperature : + 220°C (+ 428°F) / - 190°C (- 310°F)

TYPICAL QUALITY DATA

No	Grades / Parameters	101	102	104	106	108	U.M.	Test methods
		Guaranteed value						
1	Appearance	Transparent pellets						Visual
2	Melt-flow rate, min	1 - 1,9	2 - 3,9	4 - 5,9	6 - 7,9	8 - 11,9	g/10min	ASTM D1238, 372°C (702°F)@5kg
3	Tensile strength, min	32 (4641)			30(4351)	28 (4061)	MPa(psi, lb/sq in)	ASTM D638
4	Ultimate elongation, min	340					%	ASTM D638
5	Melting point	240 – 265 (464 - 509)					°C (°F)	ASTM D3418, DSC
6	Volatiles loss, max	0,18					Wt., %	3hrs@300°C (572°F)
7	Specific gravity	2,13 – 2,17 (0,0770 – 0,0784)					g/cm^3 (lb/in^3)	ASTM D792
8	Gel particles quantity	5					Qty/ 0,01sq m (15,5sq in)	Film thickness 100µm / 19,7 mil
9	Dissipation factor, max	0,0007						ASTM D1531, 1MHz (10^6 Hz)
10	Dielectric constant, max	2,15						ASTM D1531, 1MHz (10^6 Hz)

GUARANTEED STORAGE LIFE : 7 (Seven) years subject to storage in a clean and dry place in unopened bag

PACKING: two 15kg net PE bags stacked in 30kg net cardboard boxes, Pallet GW/NW = 1007kg / 900kg, 20' sea container GW/NW = 10,07MT / 9MT, 40' sea container GW/NW = 20,14MT/18MT, truck GW/NW = 20, 14MT / 18MT

TRANSPORTATION INFORMATION: UN number: not restricted for transportation, DOT(USA)/TDG(Canada), ADR/RID class, IMO/IMDG code, ICAO/IATA class: not regulated material; **Land transport: Shipping name (by truck):** Plastic Materials, Granules (Ftorplast™ FEP); **Shipping name (by rail):** Plastics, Synthetic, O.T.L., N.O.I.B.N. (Ftorplast™ FEP); **Sea transport: Shipping name:** not relevant; **Air transport: Shipping name :** Plastics, Synthetic, O.T.L. (Ftorplast™ FEP)

LABELLING : danger symbols: not regulated, manufacturer's R- and S-phrases, S51