

Flon-Chem®-1075

MODIFIED P.T.F.E. PREMIUM GRADE

The molecular polymer structure modification greatly improves properties like deformation, dielectric, clarity, heat sealability and formability.



TYPICAL APPLICATION

FLON-CHEM®-1075 Modified PTFE Premium Grade increases the already wide range of applications of virgin PTFE.

Lower permeability to gases and deformation under load, greater elastic recover and mechanical better properties open up entirely new possibilities of applications in several fields such as Chemical, Electrical and Electronic, Petrochemical, Automotive, Mechanical, Medical, Aeronautics, Semiconductor and Food industry.

PRODUCT PROPERTIES:

- Excellent mechanical properties
- Exceptional temperature resistance
- High limiting oxygen index
- Reduced deformation under load
- Higher transparency
- Excellent electrical insulating properties
- Very low gas permeability
- High degree of hydrophobicity
- Suitable for food contact

COMPLIANCE/APPROVALS:

USP Class VI: Unites States Pharmacopea according to USP<87> end USP<88>

CE Regulations: 1935/2004/CE
1895/2005/CE 10/2011/UE
2023/2006/UE

Italian Legislation: Decreto ministeriale 21/03/1973 DPR 777/82

USA Directives: FDA, Food and Drug Administration, department of Health and Human Services, Code of Federal Regulations 21 CFR Ch.1; USA regulations sections 177.1550(a)(1) and (b) Perfluorocarbon Resins;

PROPERTY	TEST METHOD	UNITS	VALUE
Color			White
Specific gravity	ASTM D792	gr/cm ³	2,15 +/- 0,03
Water absorption	ASTM D570	%	< 0,01
Flammability	UL 94		V-0
Tensile Strength	ISO 572 (ASTM D4745)	MPa	> 30
Elongation	ISO 572 (ASTM D4745)	%	> 500
Hardness	ASTM D2240	Shore D	> 50
Wear Coefficient		cm ³ min 10 ⁻⁸ Kg m h	20000-25000
Ball Hardness	ASTM D785	MPa	> 23
Permanent deformation (after 24 hrs. Relaxation at 23°C)	ASTM D621	%	9 – 12
Deformation under load (140 kg/cm ² for 24 hrs at 23°C)	ASTM D621	%	4,5 - 6
Coefficient of static friction	ASTM D1894		0,08 – 0,10
Coefficient of dynamic friction	ASTM D1894		0,06 – 0,08
Thermal conductivity	ASTM C177	W/m*K	0,24
Coefficient of linear thermal expansion from 25°C to 100° C	ASTM D696	10 ⁻⁵ /°C	12 – 14
Dielectric strength	ASTM D149	Kv/mm	> 50
Volume resistivity	ASTM D257	Ohm cm	10 ¹⁸
Surface resistivity	ASTM D257	Ohm	10 ¹⁷

