PTFE (TEFLON) – VIRGIN

SPECIFICATIONS SHEET

DETAILS

Chemical Name: PolyTetraFluoroEthylene
Common/Trade Names: Teflon®, Rulon®, Hostaflon
Abbreviation: PTFE
Properties (Colour): White in virgin form
Properties (Form): Rod, Sheet, Tube, Block
Machining: Very good
Grades: Grades of PTFE are varied by the addition of fillers. Virgin (no filler). Glass fibre filled 15% and 25%. Carbon Filled. Bronze Filled.
Chemical Resistance: PTFE is considered to be a very chemical resistant material.

KEY BENEFITS

- Does not absorb moisture
- Low coefficient of friction
- Electrical insulation
- Very good in contact with soft materials
- Excellent frictional characteristics between 'Static' and 'Dynamic' friction that is in "slip stick" application
- Outstanding chemical resistance
- Soft and formable
- Good weathering resistance
- Food Grade compatibility (Virgin)
- Tolerant of high temperature useful up to 200°C

MECHANICAL PROPERTIES

Density r (g/cm3)	2.18
Tensile Strength at Yield s (Mpa)	25
Elongation at Break %	500
Modulus of Elasticity Tensile Et (Mpa)	700
Modulus of Elasticity Bending Eb (Mpa)	-
Impact Strength kJ/mm2	NO BREAK
Hardness Ball Indent	30
Creep 1 % after 1000hr MPa	1.5
Coefficient of friction against Steel m	0.08-0.1

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(CONT.)

THERMAL PROPERTIES

Melting Point °C	327
Glass Transition Temperature °C	-20
Thermal Conductivity W/M°C	0.25
Specific Heat J/(g.K)	1
Coefficient of Linear Expansion α 10-6 .°K	120
Safe Working Temp. Short Term °C	260
Safe Working Temp. Continuous °C	150
Minimum Working Temperature °C	-

ELECRICAL PROPERTIES

Dielectric Constant Î106 Hz	2.1
Dielectric loss Factor tand 106 Hz	0.0002
Volume Resistance W.cm	10^{16}
Surface Resistance W	-
Dielectric Strength kV/mm	48
Moisture Absorption % (at 50%RH)	-

Whilst all care has been taken to provide accurate & up to date information, we cannot provide legal certification of properties. We recommend that this information be used as a design guide only. Actual testing should be undertaken to confirm data if certification is required.

McNEALL PLASTICS