

Main features

Amorphous, translucent and amber-coloured thermoplastic material. It is rigid and tenacious, has a high mechanical resistance and is resistant to thermal ageing. In addition, it has a good level of creep resistance and excellent dimensional stability. It often replaces polycarbonate when greater resistance to temperature and chemicals is required.

Applications

Connectors
Coil bodies
Parts for electromedical and electronic equipment
Gears
Flanges

Application sectors

Food
Chemical
Medical and Pharmaceutical
Electric and of Semiconductors
Mechanic

Coming soon

FDA Compatibility YES

Available colours

PHYSICAL PROPERTIES	REGULATIONS	UM	PSU
PHYSICAL PROPERTIES			
Density	DIN53479	g/cm ³	1.24
Water absorption (50% at 23° C)	**DIN53495	%	0.23
Maximum temp. for use in the air for short duration	-	°C	180
Maximum temperature of use in continuous air	-	°C	160
Minimum temperature of use in continuous air	-	°C	-20
MECHANICAL PROPERTIES			
Yield stress/tensile strength (σ_s)	ISO 527	N/mm ²	89
Elongation at break (ϵ_s)	ISO 527	%	15
Breaking load (σ_r)	DIN53455	N/mm ²	-
Elongation at break (ϵ_r)	ISO 527	%	15
Impact resistance	*DIN53453	kJ/m ²	NR
Impact resistance, notched test	*DIN53453	kJ/m ²	7
Rockwell hardness	DIN53465	Scala M	M69
Compression test, load 1% deform. nominal	*DIN53454 ⁽³⁾	N/mm ²	90
Elasticity module	*DIN53457 ⁽⁵⁾	N/mm ²	2600
THERMIC PROPERTIES			
Melting temperature	-	°C	190
VICAT softening temperature	DIN53460	°C	-
Deformation temperature under bending load	DIN53461	°C	174
Coefficient of linear thermal expansion (α)	DIN53752	K ⁻¹ X10 ⁻⁴	0.56
Thermal conductivity at 23°	DIN52612	W/(Kxm)	0.26
ELECTRICAL PROPERTIES			
Volume resistivity	**DIN53482	Ω /cm	5x10 ¹⁵
Surface resistivity	**DIN53482	Ω	3x10 ¹⁴
Dielectric constant at 10 ³ HZ (on thickness of 1 mm.)	**DIN53483	-	3.03
Dielectric dissipation factor (tan δ) a 10 ³ HZ	**DIN53483	-	0.003
Dielectric strength (on thickness of 1 mm.)	**DIN53481	kV/mm	30
Electrical leakage resistivity	112/030TI	-	CTI150
OTHER PROPERTIES			
Possibility of gluing	-	-	Yes
Absence of physiological risks	FDA	-	Yes
Dry friction coefficient on steel	DIN53375	-	0.4
Flammability	UL94	-	V-0
UV stability	-	-	No

* : MEASUREMENTS ON TEST TUBES IN ANHYDROUS STATE

(3): ON CYLINDERS Ø 12X30 MM

(4): TRACTION SPEED 5 MM/MIN

** : MEASUREMENTS ON EQUILIBRIUM TUBES WITH U.R. 50% AT A TEMPERATURE OF 23° C

(5): TRACTION SPEED 1 MM / MIN

(6): TRACTION SPEED 20 MM/MIN