

Technical specification

PS

Description High rigidity and hardness. Good electrical insulation properties. High transparency. Low water absorption. Low form of shrinkage. Low impact strength. Suitable applications include food and medicine manufacturing.

Properties	Unit	Value	Test method
Density	g/cm ³	1.05	53 479
Yield strength	mPa	-	53 455
Tensile strength	mPa	60	53 455
Elongation at break	%	3	53 455
Tensile modulus	mPa	3300	53 457
Flexural modulus	mPa	-	53 457
Ball pressure hardness	mPa	125	53 456
Impact strength	kJ/m ²	16	53 456
Creep rupture after 1000h with static load	mPa	26	
Time yield limit for 1% elongation after 1000h	mPa	20	
Glass transition temperature	°C	100	53 736
Heat deflection temperature			
Method A	°C	89	ISO 75
Method B	°C	99	ISO 75
Max./min. working temperature			
Short time	°C	85	
Conscious	°C	70/-50	
Thermal conductivity	W/(m·K)	0.16	
Coefficient of linear expansion	10 ⁻⁵ /K	8	
Impact durability (1 mm)	kV/mm	65	53 481
Dilute acids		Resistance	
Aromatic hydrocarbons		Inconstant	
Ketones, Esters		Inconstant	
Chlorinated hydrocarbons		Inconstant	
Water absorption, saturation in water at 23 °C	%	0.05	53 495
Hydrolysis (hot water + lye)		Inconstant	
Fire class	HB		According to UL94-standard.
Self ignition temperature	°C	605	-
Weather resistance	Inconstant	yellowing, brittle	

This specification is given by our best knowledge and might be submitted to changes.