



# TECHNICAL DATA SHEET

## PCTG

### 1. DESCRIPTION

PCTG is a modified copolyester for the highest industrial requirements. The material combines high chemical and thermal resistance with mechanical properties, such as high impact resistance, scratch resistance and excellent optical brilliance. In addition, it meets numerous certifications (cosmetics approval, FDA, REACH, RoHS).

### 2. FEATURES

- Good mechanical properties
- Excellent transparency
- High chemical resistance
- Clear colours
- Fire retardant according to UL94V2

### 3. PROPERTIES

TEST	METHOD	UNIT	VALUE	PRINT SETTINGS	
Flexural modulus (E-Modulus)	ISO 178	MPa	1650	Nozzle	230-270°C
Flexural strength	ISO 178	MPa	62	Heatbed	90-110°C
Tensile strength at yield	ISO 527	MPa	43	Adhesive	not required
Tensile strength at break	ISO 527	MPa	45	Speed	20-200mm/s
Elongation at yield	ISO 527	%	4,3	Cooling	20-50%
Elongation at break	ISO 527	%	215	Enclosed Space	for larger components
Notched impact strength	ISO 180	kJ/m <sup>2</sup>	94 @ 23 °C	Hardened Nozzle	no
HDT/B	ISO 75	°C	76	Max. Volumetric Speed	9 mm <sup>3</sup> /s
VICAT (VST)	ASTM D1525	°C	88	<p>Recommended settings for printers with a 0.4mm Nozzle. Max. 50% layerheight. Optimal print settings may vary between different printers and also depend on environmental factors.</p>	
Shrinking	ASTM D955	%	0,2 ~ 0,5		
Density	ASTM D792	g/cm <sup>3</sup>	1,23		
Rockwell Hardness	ASTM D785	R-Skala	105		
Flammability	UL 94	V-2	3,2 mm		
Flammability	UL 94	HB	1,5 mm		

\*Temperature resistance tested at a minimum wall thickness of 4 mm.

### 4. CERTIFICATIONS & ADDITIONAL INFORMATION



FDA  
compliant



RoHS  
compliant



REACH  
compliant



FREE  
of Silicone



TOY SAFE  
compliant



FLAMERETARDANT  
UL 94 V-2

Certifications depend on colors in final product. More info in the additional information sheet.

### 5. STORAGE AND SHELF LIFE

Store in a dry room at room temperature (18-27°C / 65-80°F). Keep out of direct heat and sunlight.

When stored correctly, this material has a shelf life of 2 years.

Additional info in our regulatory, additional information and chemical resistance data sheets.