



# TECHNICAL DATA SHEET

## PCTG

### DESCRIPTION

PCTG is a modified co-polyester for the highest industrial demands. The material combines a high chemical and thermal resistance with mechanical properties, such as high impact and scratch resistance as well as excellent visual brilliance. Additionally, it complies with multiple certifications (Cosmetics approval, FDA, REACH, RoHS).

### FEATURES

- Good mechanical properties
- High chemical resistance
- Clear colours
- Excellent transparency
- Easy printing due to low warping

### PROPERTIES <sup>1</sup>

TEST	METHOD	UNIT	VALUE
Flexural modulus (E-Modulus)	ISO 178	MPa	1650
Flexural strength	ISO 178	MPa	62
Tensile strength at yield	ISO 527	MPa	43
Tensile strength at break	ISO 527	MPa	44
Elongation at yield	ISO 527	%	4,3
Elongation at break	ISO 527	%	215
Notched impact strength	ISO 180	kJ/m <sup>2</sup>	94 @ 23 °C
HDT/B	ISO 75	°C	76
VICAT (VST)	ASTM D1525	°C	88
Shrinking	ASTM D955	%	0,2 ~ 0,5
Density	ASTM D792	-	1,21
Rockwell Hardness	ASTM D785	R-scale	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.

### CERTIFICATIONS & ADDITIONAL INFORMATION <sup>2</sup>



### 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.

1. Additional info in our regulatory, additional information and chemical resistance data sheets.  
 2. Certifications depend on colors in final product. More info in the additional information sheet.

	TEMPERATURE RESISTANCE	8
	EASE OF PRINTING	7
	VISUAL QUALITY	7
	LAYER ADHESION	9
	IMPACT RESISTANCE	9
	MAXIMUM STRESS	8
	ELONGATION AT BREAK	5

### PRINT SETTINGS

Nozzle	250-270°C
Heatbed	90-110°C
Adhesive	not required
Speed	40-60mm/s
Cooling	20-50%

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.

### NEED HELP?

If you have any question about the product and/or you are experiencing an issue, please contact us via [support@extruder.com](mailto:support@extruder.com)