PRODUCT DATA SHEET

V2.1

Panchroma By: polymaker



OVERVIEW

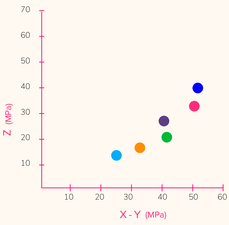
Panchroma™ is dedicated to expanding creative horizons through 3D printing. Committed to providing the broadest spectrum of colors, surface finishes, and filament effects, Panchroma™ aim to enhance projects with simplicity.

Step into the Chromaverse and transform filament palette into vibrant realities!

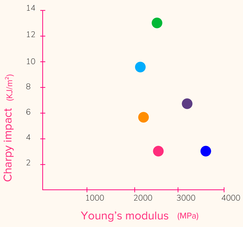
COLOR RANGES

Basic CoPE Matte Satin Silk Others

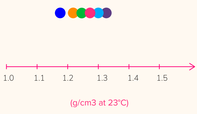
TENSILE STRENGTH



IMPACT STRENGTH



DENSITY



VICAT SOFTENING TEMP.

Basic	62°C
CoPE	66°C
Matte	63°C
Satin	62°C
Silk	64°C
Other	63°C

RECOMMENDED PRINTING SETTINGS

	PRINTING SPEED	PRINTING TEMP.	BED TEMP.
Basic	Up to 350mm/s	190-230°C	25-60°C
CoPE	Up to 400mm/s		
Matte	Up to 300mm/s		
Satin	Up to 300mm/s		
Silk	Up to 250mm/s		
Others	Up to 200mm/s		

SUPPORT

Recommended support material



PolySupport™ & PolyDissolve™ S1

POLYDRYER ™ LEVEL

Basic	1
CoPE	1
Matte	1-3
Satin	1-3
Silk	1
Other	1



DATA TABLE

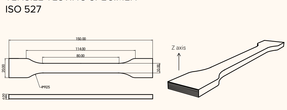
COLOR RANGE	BASIC	COPE	MATTE	SATIN	SILK	OTHERS
Density (g/cm3 at 23°C)	1.32	1.30	1.37	1.24	1.24	1.17
Vicat softening temperature (°C)	62	66	62	62	64.7	63
Young's modulus (X-Y, MPa)	3071±73.2	2515±71	1997±64	2246±91	2403±74.5	3427±65
Tensile strength (X-Y, MPa)	40.4±0.86	51.6±0.3	23.2±0.5	31.1±0.8	41.1±0.8	52.3±0.3
Tensile strength (Z, MPa)	27.2±0.3	36.1±1.2	12.2±0.7	16.7±0.4	23.8±2.8	40.5±0.5
Notched Charpy impact strength (kJ/m²)	6.76±0.44	2.9±0.1	10.0±0.8	6.7±0.5	13.8±1.3	3.3±0.2
Printing temperature (°C)	190-230					
Bed temperature (°C)	25-60					
Printing speed	<350mm/s	<400mm/s	<300mm/s	<300mm/s	<250mm/s	<200mm/s
Recommended drying setting	55°C for 6h					

1. Testing method of Vicat softening temperature is ISO 306. Testing method of Young's modulus and Tensile strength is ISO 527. Testing method of Notched Charpy impact strength is ISO 179.
2. Printing speed is based on 0.4mm line width and 0.2mm layer height. It varies with different line width and layer height.

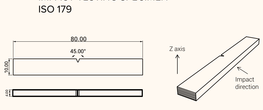
HOW TO MAKE SPECIMENS

Printing temperature	230°C
Bed temperature	50°C
Shell	2
Top & bottom layer	3
Infill	100%
Environmental temperature	Ambient
Cooling fan	ON

TENSILE TESTING SPECIMEN
ISO 527



IMPACT TESTING SPECIMEN
ISO 179



DISCLAIMER

The typical values presented in this data sheet are intended for reference and comparison purposes only. They should not be used for design specifications or quality control purposes. Actual values may vary significantly with printing conditions. End-use performance of printed parts depends not only on materials, but also on part design, environmental conditions, printing conditions, etc. Product specifications are subject to change without notice. Each user is responsible for determining the safety, lawfulness, technical suitability, and disposal/ recycling practices of Polymaker materials for the intended application. Polymaker makes no warranty of any kind, unless announced separately, to the fitness for any use or application. Polymaker shall not be made liable for any damage, injury or loss induced from the use of Polymaker materials in any application.