Version: 1.1
Last update 26-11-2025

PRUSA POLYMERS by JOSEF PRUSA

Technical datasheet

Prusament Resin Basic



Identification

Name	**Prusament Resin Basic**
Color	**All colors**
Usage	**3D printing**
Manufacturer	**Prusa Polymers a.s., Prague, Czech Republic**

Basic material properties

Odour	Low

Viscosity (25 °C) [mPa/s]	235	ISO 2431

PRUSA POLYMERS by JOSEF PRUSA

Recommended settings

Resin details		SL1S					
Type	Name	25 um [s]	First layers [s]	50 um [s]	First layers [s]	100 um [s]	First layers [s]
Basic	Orange	3.2	6.4	**3.5**	**7**	4.2	9
Basic	Black	3.2	6.4	**3.5**	**7**	4.2	9
Basic	Grey	3.2	6.4	**3.5**	**7**	4.2	9

Recommended curing after print

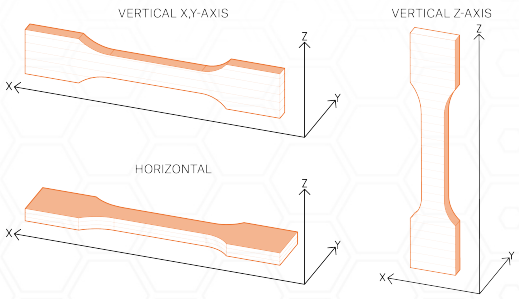
Washing in isopropyl alcohol (>90%) [min]	5
Drying (at 25 °C) [min]	3
Minimal curing time [min]	3
Optimal curing time [min]	15

PRUSA POLYMERS by JOSEF PRUSA

Mechanical properties(1)

Property/print direction	Cured XY (60 mins)	Method
Tensile strength [MPa]	22.8	ISO 527-1
Elongation [%]	8.28	ISO 527-1
Tensile modulus [MPa]	841.5	ISO 527-1
Impact strength Charpy [kJ/m2](2)	23.3	ISO 179-1
Notched impact strength Charpy [kJ/m2](3)	4.7	ISO 179-1
Izod impact strength [kJ/m2] (4)	20.3	ISO 180
Notched Izod impact strength [kJ/m2] (5)	2.1	ISO 180
Heat deflection temperature (0,45 MPa)	44.3	ISO 75
Heat deflection temperature (1,8 MPa)	34.6	ISO 75
Hardness - Shore D	79	ISO 164
Flexural strength [MPa]	42.1	ISO 178
Flexural modulus [MPa]	938	ISO 178
Deflection at flexural strength [mm]	12.26	ISO 178

(1) Original Prusa SL1S Speed 3D printer was used to make testing specimens. PrusaSlicer-2.9:0 was used to create G-codes with the following settings: Prusament Resin Basic; layer 0,05mm; faded layers: 0; exposure times: 3.5s/7s (SL1S), without supports and pad; other parameters set the default.
(2) Impact resistance Charpy - Edgewise direction of blow according to ISO 179-1.
(3) Notched impact resistance Charpy - Edgewise direction of blow according to ISO 179-1.
(4) Izod impact resistance - Edgewise direction of blow according to ISO 180.
(5) Notched Izod impact resistance - Edgewise direction of blow according to ISO 180.



Basic safety information

This resin is not meant for contact with food, drinks, or medical use on or in the human body. Always read the material safety data sheet thoroughly.

Resins are classified as dangerous chemicals and it is necessary to dispose of them properly in designated containers.

Resin bottles (empty or full) must never be disposed of or poured into the general waste.

Manipulation directions

Shake well before use.

Store at room temperature away from direct sunlight.

Use protective equipment for manipulation.

Do not pour the contents of the canister into general waste. Dispose of empty bottles and unused resin at designated places.

Disclaimer

The results presented in this data sheet are just for your information and comparison. Values are significantly dependent on print settings, operator experiences, and surrounding conditions. Everyone has to consider suitability and possible consequences of printed parts usage. Prusa Polymers corp. can not carry any responsibility for injuries or any loss caused by using Prusament Resin Basic. Before the use of Prusamen Resin Basic material read properly all the details in the available safety data sheet (SDS).