

Version: 2.1
Last update 15-05-2025

Technical datasheet

Prusament Resin Model



Identification

Name	Prusament Resin Model
Color	All colors except Transparent Clear
Usage	3D printing
Manufacturer	Prusa Polymers a.s., Prague, Czech Republic

Basic material properties

Odour	Low
-------	-----

Viscosity (20 °C) [mPa.s]	200 – 350	ISO 2431
---------------------------	-----------	----------

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]
Model	Prusa Orange	2.2	5	2.4	6	2.9	8
Model	Rich Black	2	5	2.4	6	2.9	8
Model	Anthracite Grey	2	5	2.2	6	2.9	8
Model	Grass Green	2	5	2.2	6	2.9	8
Model	Bright Yellow	2.2	5	2.4	6	2.9	8
Model	Bright Magenta	2.1	5	2.4	6	3.1	8
Model	Bright Cyan	2.2	5	2.4	6	3.1	8
Model	Brick Red	2	5	2.4	6	3.3	8
Model	Sandstone Model	2	5	2.2	6	2.6	8
Model	Terra Brown	2	5	2.2	6	2.6	8
Model	Transparent Green	1.8	5	2.2	6	2.6	8
Model	Transparent Red	2.2	5	2.4	6	2.9	8
Model	Transparent Amber	2	5	2.4	6	2.9	8
Model	Classic Red	2	5	2.2	6	2.6	8
Model	Alabaster White	2.2	5	2.4	6	3.1	8
Model	Solid Grey	2.2	5	2.4	6	3.1	8
Model	Ultra Violet	2.2	5	2.4	6	2.9	8
Model	Neutral Beige	2.2	5	2.4	6	3.1	8

Important Update - Exposure Times Changed

As of **May 15, 2025**, exposure times for resin printing have been updated. Resin bottles delivered **after this date** require a **longer exposure time - approximately 10% per layer**. To ensure optimal results, we **highly recommend using the latest configuration bundle** in PrusaSlicer, which includes the updated settings.

Recommended curing after print

Washing in isopropyl alcohol (>90%) [min]	5
Drying (at 45 °C) [min]	3
Minimal curing time [min]	3
Optimal curing time [min]	3

Mechanical properties(1)

Property/print direction	Uncured XY	Cured XY (3 mins)	Cured XY (60 mins)	Method
Tensile strength [MPa]	19,4 ± 1,7	26,1 ± 1,7	59,4 ± 2,5	ISO 527-1
Elongation [%]	12,9 ± 2,8	7,3 ± 1,2	3,7 ± 0,2	ISO 527-1
Tensile modulus [GPa]	0,6 ± 0,06	1,0 ± 0,08	2,3 ± 0,10	ISO 527-1
Impact strength Charpy [kJ/m2](2)	29,0 ± 5,0	6,3 ± 0,7	6,4 ± 1,1	ISO 179-1
Notched impact strength Charpy [kJ/m2](3)	6,5 ± 2,2	3,3 ± 1,2	2,8 ± 1,1	ISO 179-1
Heat deflection temperature (0,45 MPa)	40	42,5	60	ISO 75
Heat deflection temperature (1,28 MPa)	35	35	47,5	ISO 75
Hardness - Shore D	84	84.5	89	ISO 164

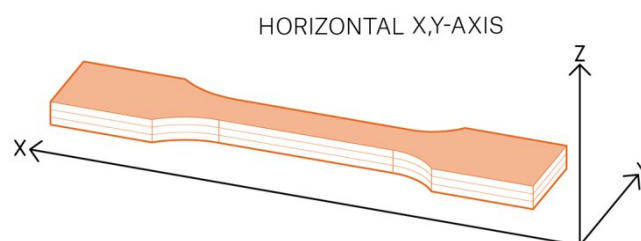
Property/print direction	Uncured YZ	Cured YZ (3 mins)	Cured YZ (60 mins)	Method
Tensile strength [MPa]	24,2 ± 2,5	29,3 ± 1,5	58,2 ± 2,9	ISO 527-1
Elongation [%]	11,7 ± 2,4	7,6 ± 1,4	3,5 ± 0,4	ISO 527-1
Tensile modulus [GPa]	0,8 ± 0,14	1,1 ± 0,07	2,3 ± 0,7	ISO 527-1
Flexural strength [MPa]	NB*	21,7 ± 5,6	51,3 ± 2,3	ISO 178
Flexural modulus [GPa]	NB*	0,7 ± 1,18	1,6 ± 0,12	ISO 178
Deflection at flexural strength [mm]	> 14	12,4 ± 0,7	8,5 ± 1,6	ISO 178
Hardness - Shore D	81.5	83	87.5	ISO 164

* NB (no break)

(1) Original Prusa SL1S Speed 3D printer was used to make testing specimens. PrusaSlicer-2.5:0 was used to create G-codes with the following settings: Prusament Resin Model; layer 0,05mm; faded layers: 0; exposure times: 2.3s/10s (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.



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 Model. Before the use of Prusament Resin Model material read properly all the details in the available safety data sheet (SDS).

T A
C R

This project is co-financed with the state support of the Technology Agency of the Czech Republic and the Ministry of Industry and Trade within the **TREND Program**.

www.tacr.cz

www.mpo.cz