

Somos® EvoLVe 128 is a low-viscosity photosensitive resin material developed by DSM. It has high smoothness, stable performance, wide application, and performance similar to engineering plastics ABS and PBT.



■ ■ Advantages

Smooth surface, stable support size, high precision, excellent toughness performance, waterproof and moisture-proof, fast delivery. It can meet the process requirements of painting, screen printing, electroplating, etc.

■ ■ Disadvantages

Average strength and toughness.

■ ■ Tolerance changes over time

3 days: 0.15mm or 0.15%; 7 days: 0.2mm or 0.2%; 15 days: 0.25mm or 0.25%

■ ■ Accuracy

100mm ±0.1mm

■ ■ Recommended reasons

The surface of the part is delicate and the dimensional stability is high. It is widely used in the production of various functional prototypes, manufacturing tools, etc.

Note

When the material is placed under normal air temperature, the parts will gradually turn yellow and deform over time, especially when exposed to the sun to accelerate the process. It is recommended that you prevent storage in a cool, backlit place. The toughness and strength of the parts are general. If there are higher requirements for strength, toughness, and temperature resistance, the corresponding high-performance resin or nylon materials can be used.

Material parameters

Heat distortion temperature (HDT@0.455 MPa) (ASTM Method D648)	46°C
Heat distortion temperature (HDT@1.82 MPa) (ASTM Method D648)	41°C
Shore hardness (ASTM Method D2240)	79D
Tensile strength (ASTM Method D638)	35MPa
Elongation at break (ASTM Method D638)	6-9%
Flexural strength (ASTM Method D790)	67MPa
Flexural modulus (ASTM Method D790)	2178 ~ 2222MPa
Notched impact strength (ASTM Method D256)	23 ~ 29J/m
Water absorption (ASTM Method D570-98)	0.4%
Poisson's ratio (ASTM Method D638)	0.41

Application areas

- Auto parts and prototypes for structural and functional verification.
- Digital electronic product structure verification, appearance verification.
- Mechanical and electrical equipment structure and appearance verification.