



3DM-TOUGH

Photopolymer resin for models requiring toughness and transparency

The great feature of the 3DM-TOUGH material is its toughness, its high clarity and transparency aspect without any yellowing in time.

This clear material distinguished mainly by its accuracy, its low shrinkage and its durability. The 3DM-TOUGH material produces functional and colorless parts that are similar to transparent plastics with good weathering resistance, good scratch resistance and dimensional stability.

This resin offers many properties similar to traditional engineering plastics making this material ideal for many applications in automotive, medical and electronic markets, including functional prototypes, packaging and bottles, flow analysis, microfluid tests, lighting and lenses models.

The 3DM-TOUGH resin is an excellent choice for persons which require to print accurate, tough and transparent models.

Suitable for :

Medical models & devices
Functional prototyping
Electronics
Architecture & Art
Automotive
Packaging & Bottles
Microfluid & Flow analysis
Lighting & Lenses

Your benefits :

Toughness
Low shrinkage
Weathering & Scratch resistance
Colorless & Transparency
Flexibility
Dimensional stability
Accuracy
Durability

MECHANICAL PROPERTIES

Tensile Modulus	ISO 527-2/93	2300-2600 MPa
Tensile Strength	ISO 527-2/93	50-60 MPa
Elongation @ Break	ISO 527-2/93	5-7%
Flexural Modulus	ISO 178/01	2000-2200 MPa
Flexural Strength	ISO 178/01	60-70 MPa
Glass Transition Temperature	ISO 6721-7/96	50-55°C
HDT @ 0.45 MPa	ISO75-2/04	55-60°C
IZOD Notched	ASTM D256	25-30 J/m
Hardness (Shore D)	ISO 868	84-86

RESIN PROPERTIES

Aspect		clear transparent resin
Viscosity	@ 25°C	110-130 mPa.s
Density	@ 25°C	1,14 g/cm3