



3DM-RIGID

Photopolymer resin for manufacturing rigid plastic parts

3DM-RIGID is a low viscosity resin, highly reactive suited to 3D printing of rigid plastic parts. This resin brings dimensional stability and high-performance mechanical properties to your printed models. Its accuracy and his exceptional surface finish gives to your printed parts a surface quality comparable to injection molded plastic materials.

This material was designed to manufacture rigid parts for prototyping applications and for various personalised models.

The 3DM-RIGID resin was mainly designed for parts requiring a good balance between operating temperature, flexural modulus and elongation at break, making it ideal for manufacturing tough and rigid parts in a wide variety of industries such as automotive, art, architecture, sport and goods of consumption.

Suitable for :

Automotive / Architecture / Art
Sport / Goods of consumption
Tough & Rigid plastic parts
SLA, DLP and LCD systems

Your benefits :

Low viscosity resin / Fast curing
Accuracy / Dimensional stability
Low shrinkage / Temperature resistance
Exceptional surface finish

MECHANICAL PROPERTIES

Tensile Modulus	ISO 527-2/93	2000-2300 MPa
Tensile Strength	ISO 527-2/93	35-40 MPa
Elongation @ Break	ISO 527-2/93	5-7 %
Flexural Modulus	ISO 178/01	2800-3000 MPa
Flexural Strength	ISO 178/01	90-100 MPa
IZOD Notched	ASTM D256	15-20 J/m
HDT @ 0.45 MPa	ISO75-2/04	70-80°C
Hardness (Shore D)	ISO 868	84-86
Fracture toughness - K1c	ISO 13586 / 20795-1	1,25-1,45 MPa√m
Fracture toughness - G1c	ISO 13586 / 20795-1	850-1000 J/m2

RESIN PROPERTIES

Aspect		opaque
Viscosity	@ 25°C	150-200 mPa.s
Density	@ 25°C	1.20 g/cm3