THERMA DM220

Technical Data Sheet





THE NANO-FILLED CERAMIC MATERIAL

THERMA DM220 is a photosensitive material for DWS' SLA systems. It is suitable for thick and thin models. It can be used to make liquid silicones and vulcanized rubber at a maximum temperature of 180-200°C.

THE THERMA SERIES

The Therma series includes all the materials suitable for rubber moulding of jewellery models, fashion accessories, design models and industrial parts. THERMA DM220, along with the materials of the Therma Series, was developed exclusively for DWS 3D printers.

ADVICE FOR USE

A thermal post treatment of 30 minutes at 120°C is recommended in order to obtain the maximum thermal resistance.

HINTS FOR DESIGN

THERMA DM220 is suitable for thick and thin models. It can be used to make liquid silicones and vulcanized rubber at a maximum temperature of 180-200°C.

Models made of THERMA DM220 can be easily removed from the rubber mould and they can also be broken, allowing to carrying out some difficult cuts that would not be possible, otherwise, with a metal model.

THERMA DM220 delivers extremely smooth surfaces and exceptionally precise and sharp details.

FEATURES

- Smooth Surfaces
- High Accuracy
- High Resolution
- No further manual finishing needed

TECHNICAL CHARACTERISTICS OF THE LIQUID MATERIAL

| Environmental Values for Use | 22°C - 27°C - max, RH 40% - 60% |
|------------------------------|---------------------------------|
| Appearance / Colour | Liquid / Light Blue |
| Viscosity | 12050 ~ 18050 mPa•s at 25°C |
| Density | 1,52 g/cm ³ |

TECHNICAL CHARACTERISTICS OF THE RESIN AFTER UV CURING

| Surface Hardness (Shore D) | 91 ~ 93 |
|----------------------------|----------------------|
| Flexural Strength (MPa) | 65 ~ 120 |
| Flexural Modulus (MPa) | 4600 ~ 6500 |
| Elongation at Break (%) | 1~2 |
| Tensile Strength (Mpa) | 40 ~ 55 |
| Tensile Modulus (Mpa) | 4650 ~ 5600 |
| HDT@0,46MPa | 75 ~ 110 |
| Application / Use | Rubber master models |

Technical specification subject to change without notice.



DWS srl