



Ultracur3D® FL

Flexible Reactive Urethane Photopolymer

Ultracur3D® FL (flexible product line) is designed to offer exceptional flexibility combined with high tear strength for a 3D printing photopolymer. Its well-balanced properties enable an extensive range of advanced applications and material family will continue to evolve based on our customers' requirements.

Benefits at a Glance

- High elongation @ break
- Excellent strength
- Good aging properties

Example Applications

- Flexible prototypes
- Foot-wear applications
- Cushioning and lattice applications
- Shock absorber

Material Properties: Ultracur3D® FL 300

Ultimate Tensile Strength	4 MPa
Ultimate Elongation	306 %
Tear Strength	15 kN/m
Hardness	37 A
Viscosity (30°C)	890 mPas

Project Reference Lattice Absorby

■ Description of the project & challenge:

The drop tower shows the different mechanical responses of different materials and structures. A steel ball is dropped from the tower onto a printed lattice geometry. The ball bounces back. A high rebound stands for low kinetic energy absorption, while a low rebound (or no rebound) shows high energy absorption.

■ Our solutions and added value for the customer:

We can demonstrate to the customer that we have an extensive material portfolio and may have a material a customer is specifically looking for. Different applications range from footwear sole (-rebound) to helmets (shock absorption) can be achieved with the right material design combination.

In addition we can tell the customer, that we can simulate the material and lattice behavior as well.

