Ultraflexx
Technical Data sheet

DESCRIPTION

Superior, TPE-based, quality **elastomer with optimal shape memory**, **returning quickly to its original form after bending, compressing or twisting.**
Operating range from –50° to +120°.
Suitable for use in many industrial fields due to its superior properties: **fatigue resistance, oil-corrosion protection, resilience and elastic response**. An ideal material for use in sectors such as **sports footwear, automotive, industrial bumpers, high strength cases and sectors where elastic components are used for energy absorption**.

PRINTING MODES

- Extruder Temperature: 225°-240°
- Bed Printing Temperature: 50°
- Suggested printing speed: 35 mm/sec

APPLICATIONS

Ultraflexx is a thermoplastic filament especially suitable 3D Printing Prototyping Technologies FFF (Fused Filament Fabrication).

Following are tests carried out to proof the features and properties of the material:

Property Test Condition	**Standard**	**Unit**	**Values**
Mechanical Properties			
Charpy Impact at 23° C	ISO 179	kJ/m2	No Break
Charpy Impact at -30° C	ISO 179	kJ/m2	No Break
Flexural modulus	ISO 178	MPa	25
Tensile strain at break	ISO 527	%	> 200
Thermal Properties			
Vicat softening temperature	ISO 306	°C	175
Other Properties			
Water Absorption	ISO 62	%	0,8
Density	ISO 1183	g/cc	1,15
Melt flow rate - MFR	ISO 1133	g/10 min	10

SUPPLY FORM

Ultraflexx is supplied as Filaments.
External filament diameter is 1,76 mm (Diameter tolerances + 0.02/-0,03 mm; ovality tolerances: max 0,05 mm).
It has to be kept in its original packaging. Avoid direct exposure to sunlight.