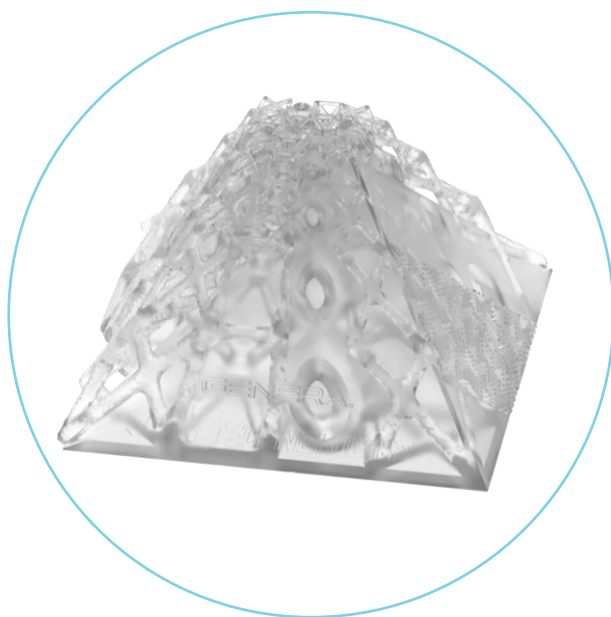


GENERA.



MATERIAL LIBRARY

Creation made reliable.

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Process



The GENERA process features an open material library.

New materials from our material partners are continuously screened and assessed by the GENERA Team. The GENERA Process Development Team carefully tunes the process parameters for each resin to provide you the best possible results. Together with our material partners we validate each material according to their specific properties before a material is released.

Material Status



Released

In validation

Compatible Systems

All materials and material parameters are compatible with our full product portfolio, unless indicated otherwise.



G1 / F1.

The G1/F1 brings the GENERA workflow and automation to your desktop. It is compatible with our validated material library and uses a cartridge-based material unit to store the materials. The G1/F1 utilizes the GENERA shuttle technology for a clean and safe workflow. Not for dental use.



G3.

The powerful technologies of the G2 and F2 have now been integrated into one compact machine. For the first time ever, users can take a digital part file to a fully washed and post-cured part, all in one machine.



A2.

True industrial automation has reached the 3D printing market with GENERA's A2 system. The A2 automation module connects the powerful G2 printer with the F2 post-processing unit to allow for lights out manufacturing.



G2.

Higher volume. More speed. 3D printing production like never before. The G2 was developed for industrial use, for service providers and factories alike. It can double the output since it can print two separate jobs without supervision.



F2.

Forget everything you know about post-processing. The intelligent washing program of the F2 adapts to the structure of the printed component and the material used, providing perfect surfaces and printing results every time.

MATERIAL

Loctite 3D IND475

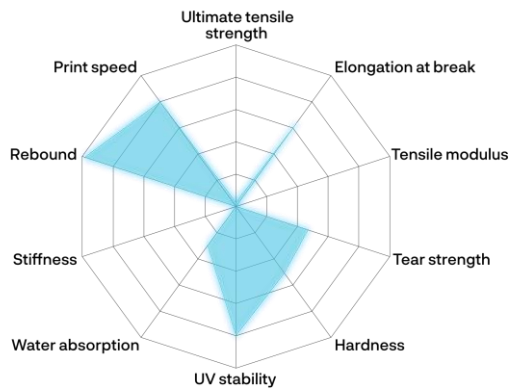
CATEGORY

ELASTOMERIC

GENERA.



MATERIAL STATUS



MECHANICAL DATA

Young's Modulus	1.1 MPa
Tensile Strength	3.1 MPa
Rebound	55 %
Elongation at Break	200 %
Tear strength	13 kN/m
Shore Hardness	57 A

PROPERTIES

True elastomeric behaviour
Fast printing with low shrinkage behaviour
High resilience / High energy return

APPLICATIONS

Air and dust gaskets
Flexible seals and housings
Cushioning pads

MATERIAL

Loctite 3D MED414

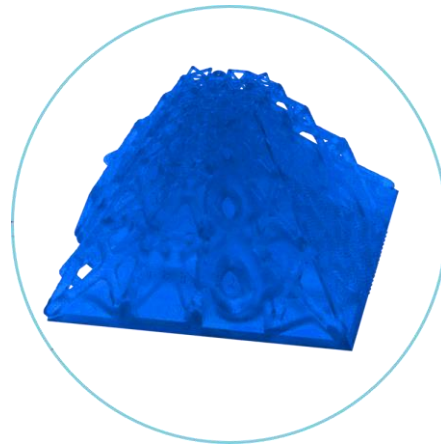
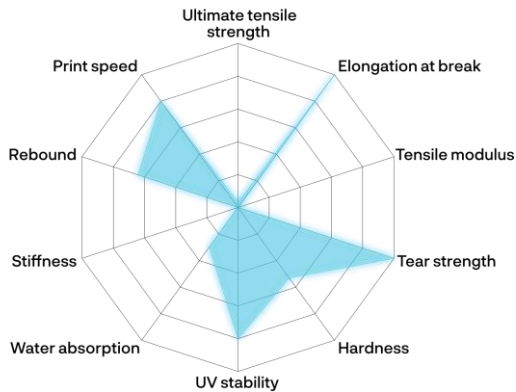
CATEGORY

ELASTOMERIC

GENERA.



MATERIAL STATUS



MECHANICAL DATA

Young's Modulus	9 MPa
Tensile Strength	2,5 MPa
Rebound	50%
Elongation at Break	240 %
Tear Strength	16 kN/m
Shore Hardness	51 A

PROPERTIES

True Elastomeric Behaviour
Good Balance of Strength & Elongation
Good Tear Resistance & Torsional Flexibility

APPLICATIONS

Custom Fit Audiology Parts
Medical Equipment Components
Wearables

MATERIAL

Loctite 3D 8195

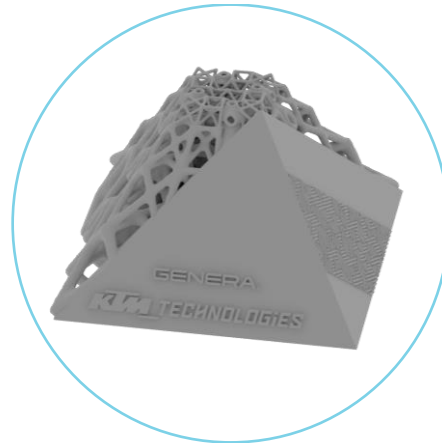
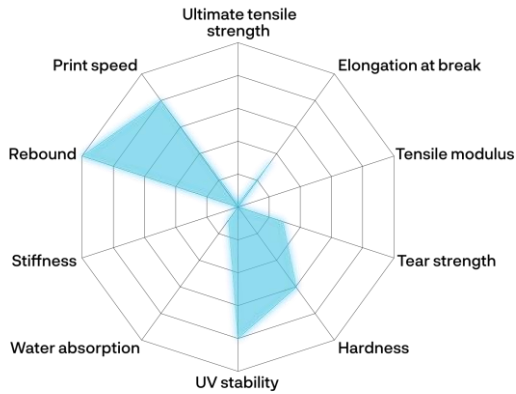
CATEGORY

ELASTOMERIC

GENERA.



MATERIAL STATUS



MECHANICAL DATA

Young's Modulus	3.55 MPa
Tensile Strength	3.28 MPa
Rebound	71 %
Elongation at Break	81.3 %
Tear strength	8 kN/m
Shore Hardness	60 A

PROPERTIES

Elastomeric 3D printing resin
Extremely quick rebound performance
High-resolution
Excellent surface finish

APPLICATIONS

Grips and cushions
Sealings
Functional rubber prototypes

MATERIAL

Ultracur3D EL150

CATEGORY

ELASTOMERIC

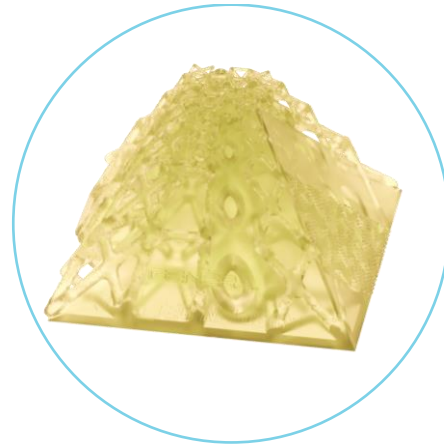
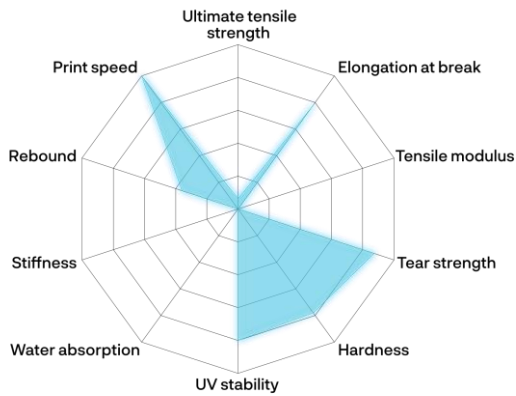
MATERIAL STATUS



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MECHANICAL DATA

Young's Modulus	25 MPa
Tensile Strength	6 MPa
Rebound	25 %
Elongation at Break	150 %
Tear strength	15 kN/m
Shore Hardness	70-80 A

PROPERTIES

Medium hardness
High strength
High elongation at break
Good rebound

APPLICATIONS

Footwear
Prototyping
Cushioning pads
Flexible grip

MATERIAL

Ultracur3D EL4000

CATEGORY

ELASTOMERIC

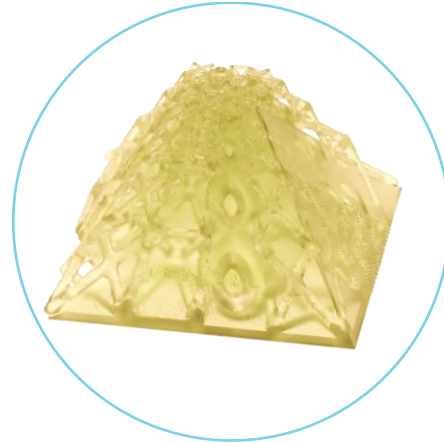
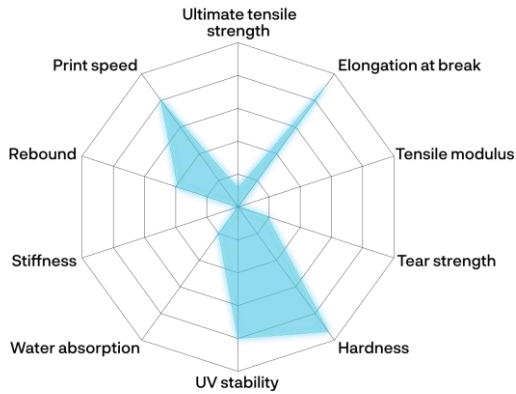
MATERIAL STATUS



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MECHANICAL DATA

Young's Modulus	42 MPa
Tensile Strength	11 MPa
Rebound	30 %
Elongation at Break	172 %
Tear strength	37 kN/m
Shore Hardness	90 A

PROPERTIES

High hardness
High Green Strength
High elongation at break
Superior Strength, Rebound and Tear Resistance

APPLICATIONS

Footwear
Bike Saddles
Cushioning pads
Intricate Parts

MATERIAL

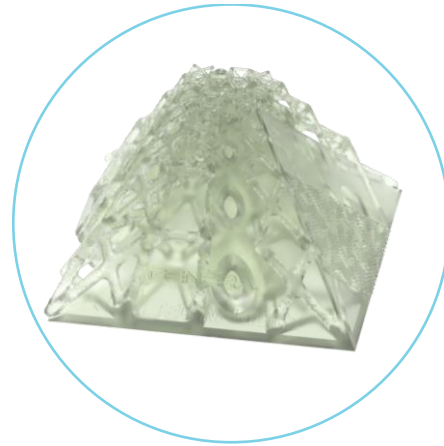
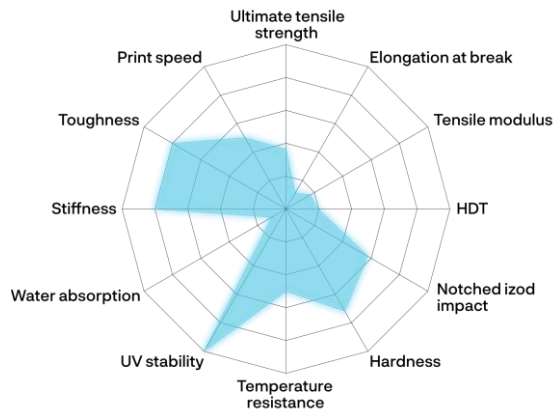
Arkema GEN619M

CATEGORY

TOUGH

GENERA.
ARKEMA

MATERIAL STATUS



MECHANICAL DATA

Young's Modulus	1700 MPa
Tensile Strength	35 MPa
HDT	55 °C
Elongation at Break	21 %
IZOD Impact	41,9 J/m
Shore Hardness	69 D

PROPERTIES

Biocompatible
High Toughness
Good balance between HDT, Elongation and Young's Modulus

APPLICATIONS

Prosthetics and Wearables
Medical equipment and components

*not compatible with the G1/F1 system

MATERIAL

Loctite 3D IND403

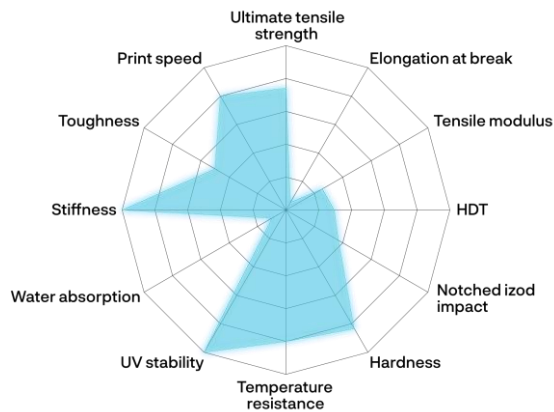
CATEGORY

TOUGH

MATERIAL STATUS



GENERA.



MECHANICAL DATA

Young's Modulus	2600 MPa
Tensile Strength	70 MPa
HDT	80 °C
Elongation at Break	10 %
IZOD Impact	27 J/m
Shore Hardness	80 D

PROPERTIES

High heat deflection temperature of 80 °C
Tough with good dimensional stability
Good surface finish

APPLICATIONS

Tooling and Molds
Interior applications in automotive

*not compatible with G1 / F1 system

MATERIAL

Loctite 3D IND405

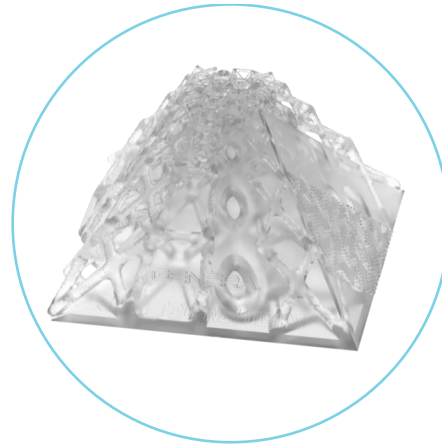
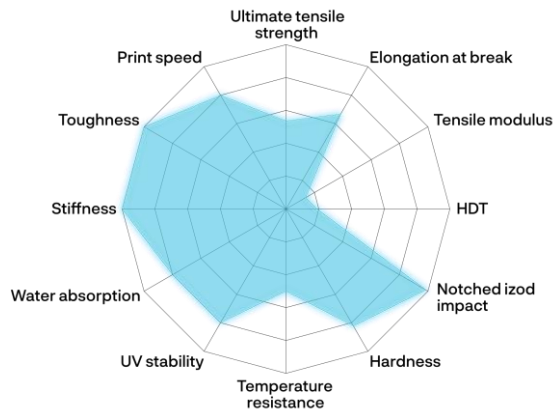
CATEGORY

TOUGH

GENERA.



MATERIAL STATUS



MECHANICAL DATA

Young's Modulus	1378 MPa
Tensile Strength	52 MPa
HDT	53 °C
Elongation at Break	127 %
IZOD Impact	72 J/m
Shore Hardness	79 D

PROPERTIES

High impact resistance with high elongation
The toughest clear resin
Functional prototyping

APPLICATIONS

Clear prototypes
Fluid routing & consumer goods
Manufacturing aids/tools
Housings

*not compatible with G1 / F1 system

MATERIAL

Loctite 3D PRO476

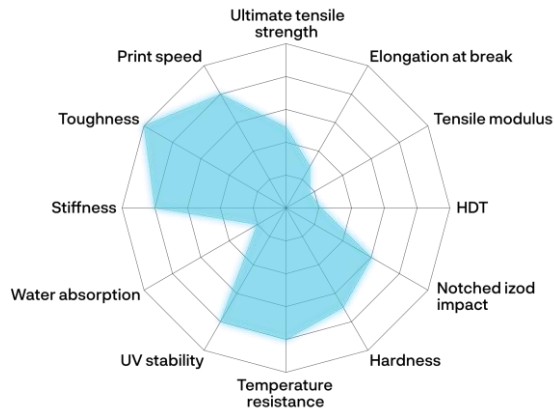
CATEGORY

TOUGH

GENERA.



MATERIAL STATUS



MECHANICAL DATA

Young's Modulus	1700 MPa
Tensile Strength	42 MPa
HDT	62 °C
Elongation at Break	60 %
IZOD Impact	45 J/m
Shore Hardness	70 D

PROPERTIES

Tough
High impact resistance
Moderate heat resistance
Excellent surface finish

APPLICATIONS

Textured and highly detailed parts
Performance prototypes
Jigs, fixtures and manufacturing aids
Housings and covers

MATERIAL

Loctite 3D MED412

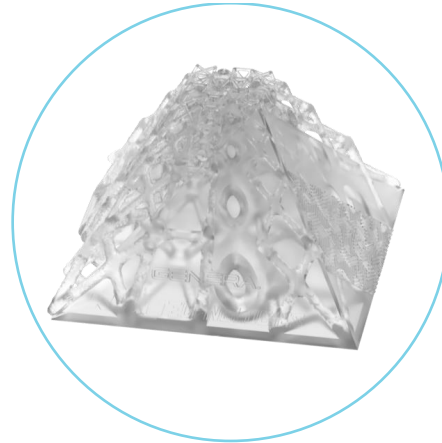
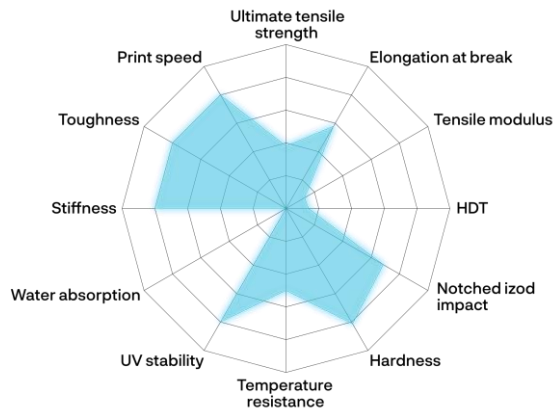
CATEGORY

TOUGH

GENERA.



MATERIAL STATUS



MECHANICAL DATA

Young's Modulus	1305 MPa
Tensile Strength	37 MPa
HDT	39 °C
Elongation at Break	110 %
IZOD Impact	50 J/m
Shore Hardness	78 D

PROPERTIES

ISO 10993-5 & 10 standards for biocompatibility
Tough with superior elongation
Good impact strength and surface finish

APPLICATIONS

Class I and II medical devices
Medical equipment components

MATERIAL

Loctite 3D 3172

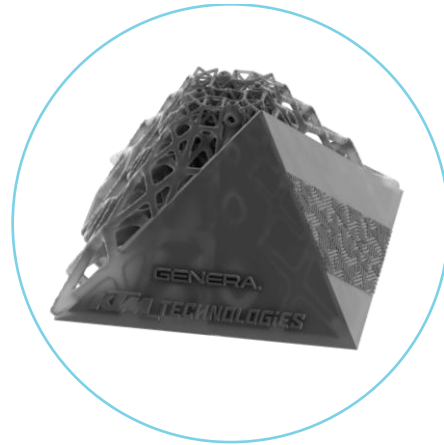
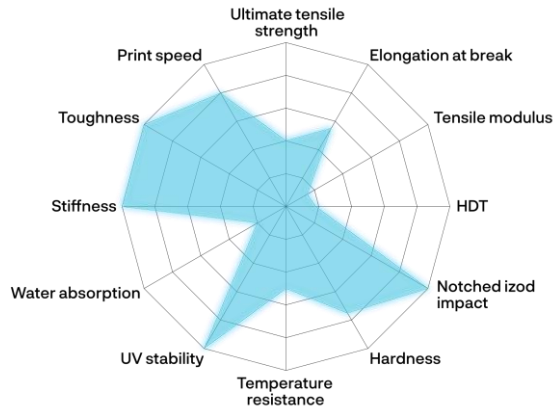
CATEGORY

TOUGH

MATERIAL STATUS



GENERA.



MECHANICAL DATA

Young's Modulus	1494 MPa
Tensile Strength	39 MPa
HDT	51 °C
Elongation at Break	105 %
IZOD Impact	73 J/m
Shore Hardness	72 D

PROPERTIES

Tough & durable
Superior impact strength
Nice surface finish, machinable

APPLICATIONS

Manufacturing aids / jigs & fixtures
Housings
Insoles

MATERIAL

Ultracur3D ST80W

CATEGORY

TOUGH

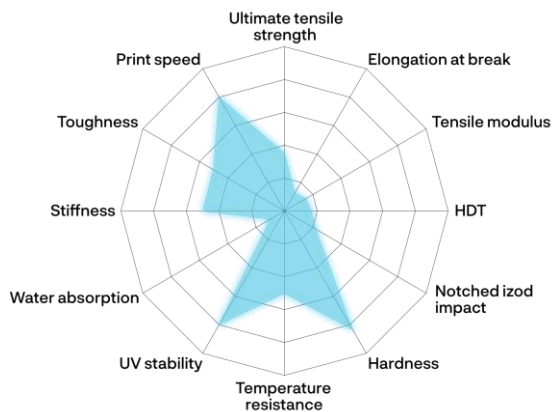
MATERIAL STATUS



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Industry Additive Manufacturing



MECHANICAL DATA

Young's Modulus	1500 MPa
Tensile Strength	34 MPa
HDT	46 °C
Elongation at Break	19 %
IZOD Impact	16 J/m
Shore Hardness	80 D

PROPERTIES

Well-balanced multi-purpose material
High toughness and impact resistance
High UV stability

APPLICATIONS

Electrical casings
Consumer goods and tools
Orthopaedics

MATERIAL

Ultracur3D ST1400

CATEGORY

TOUGH

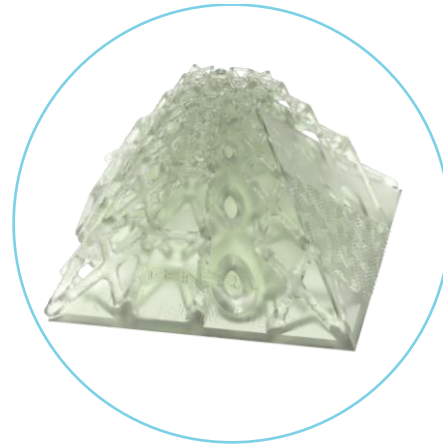
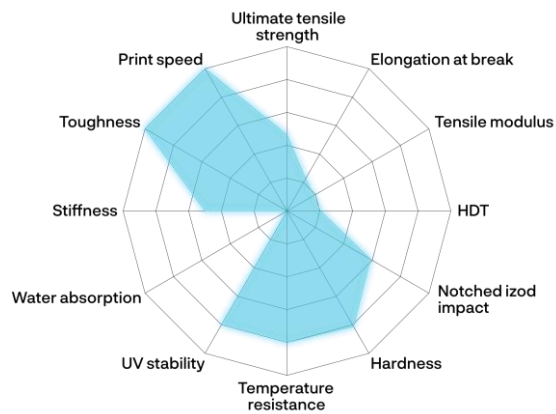
MATERIAL STATUS



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MECHANICAL DATA

Young's Modulus	1900 MPa
Tensile Strength	45 MPa
HDT	57 °C
Elongation at Break	43 %
IZOD Impact	43 J/m
Shore Hardness	78 D

PROPERTIES

Biocompatible
High Speed & Toughness
Comparable to unfilled Polypropylene

APPLICATIONS

Prosthetics & Medical Accessories
Diagnostic Equipment
Industrial Housings

MATERIAL

Ultracur3D ST7500G

CATEGORY

TOUGH

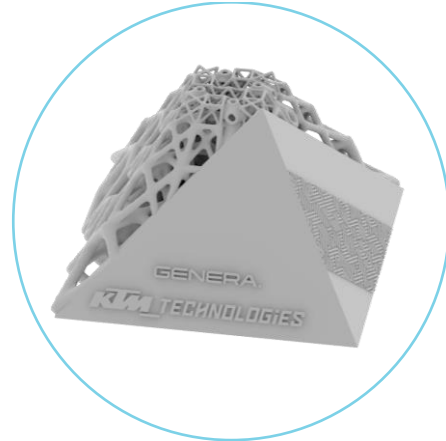
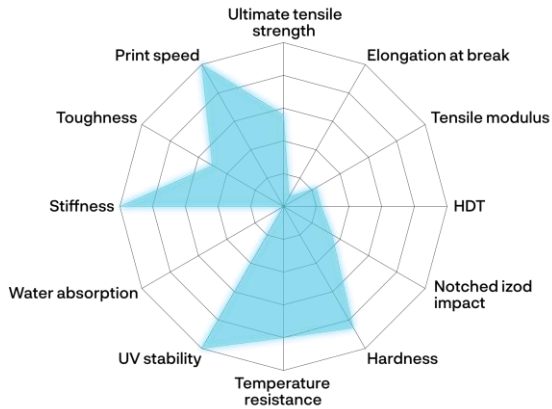
MATERIAL STATUS



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MECHANICAL DATA

Young's Modulus	2300 MPa
Tensile Strength	54 MPa
HDT	64 °C
Elongation at Break	13 %
IZOD Impact	25 J/m
Shore Hardness	82 D

PROPERTIES

Fast and Easy to Print
Excellent Detail
High Surface Finishing

APPLICATIONS

Figurines
Housings & Prototypes
High Details and Texture Parts

MATERIAL

Loctite 3D MED413

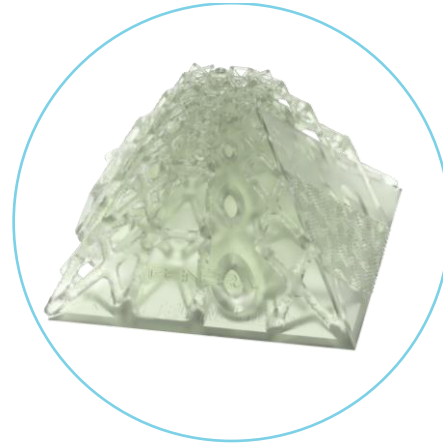
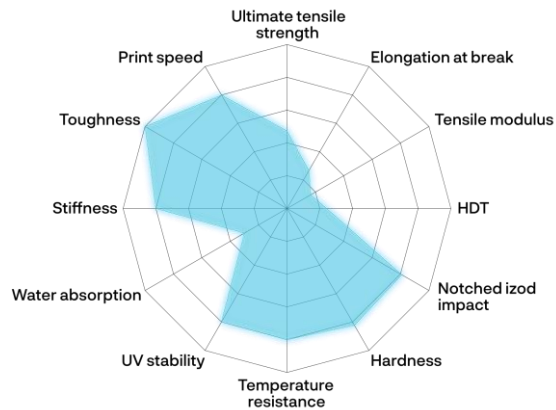
CATEGORY

TOUGH

GENERA.



MATERIAL STATUS



MECHANICAL DATA

Young's Modulus	1673 MPa
Tensile Strength	46 MPa
HDT	68 °C
Elongation at Break	51 %
IZOD Impact	59 J/m
Shore Hardness	79 D

PROPERTIES

ISO 10993-5 & -10 standards for biocompatibility
Outstanding surface finish
Excellent machineability

APPLICATIONS

Medical devices
Medical equipment components
Hearing aids

MATERIAL

Loctite 3D 3843

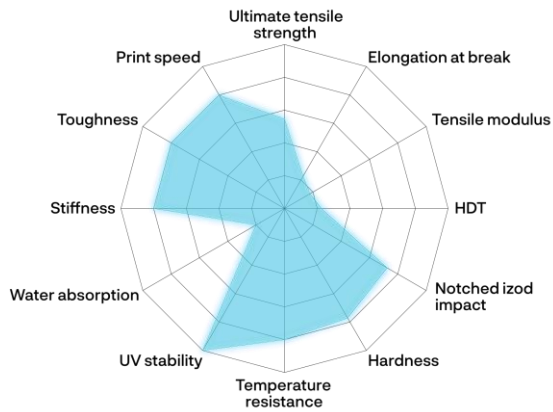
CATEGORY

TOUGH

GENERA.



MATERIAL STATUS



MECHANICAL DATA

Young's Modulus	1806 MPa
Tensile Strength	53 MPa
HDT	60 °C
Elongation at Break	43 %
IZOD Impact	53 J/m
Shore Hardness	74 D

PROPERTIES

Semi-flexible
Moderate heat resistance, HDT 60°C
Superior strength and impact resistant
Excellent matt surface finish

APPLICATIONS

Manufacturing aids
Jigs and fixtures
Housings and covers
Insoles

MATERIAL

Loctite 3D 3843W

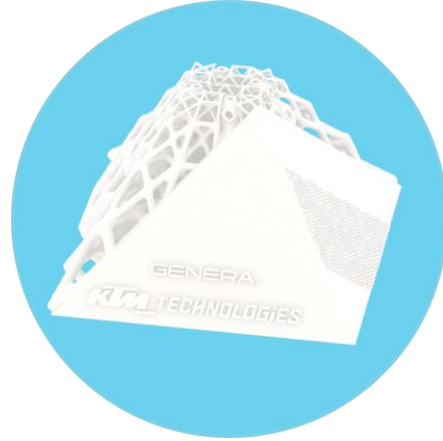
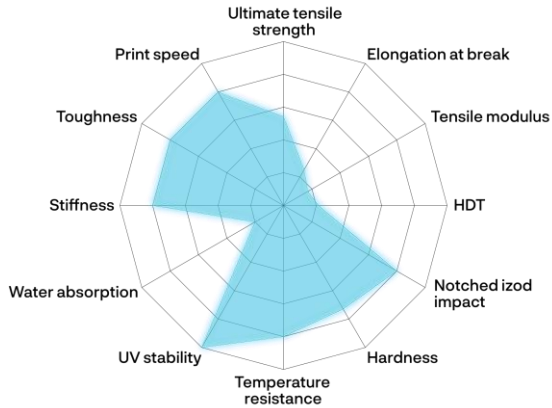
CATEGORY

TOUGH

GENERA.



MATERIAL STATUS



MECHANICAL DATA

Young's Modulus	1800 MPa
Tensile Strength	51 MPa
HDT	63 °C
Elongation at Break	43 %
IZOD Impact	53 J/m
Shore Hardness	74 D

PROPERTIES

Semi-flexible
Moderate heat resistance, HDT 60°C
Superior strength and impact resistant
Excellent matt surface finish

APPLICATIONS

Manufacturing aids
Jigs and fixtures
Housings and covers
Insoles

MATERIAL

Loctite 3D IND406

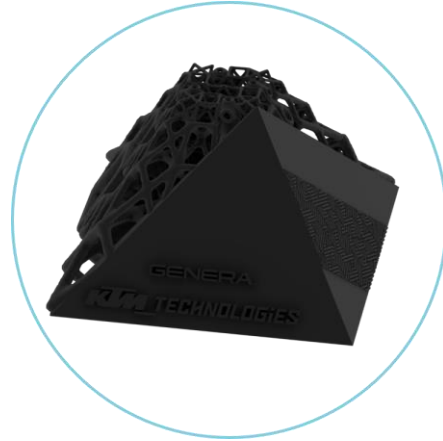
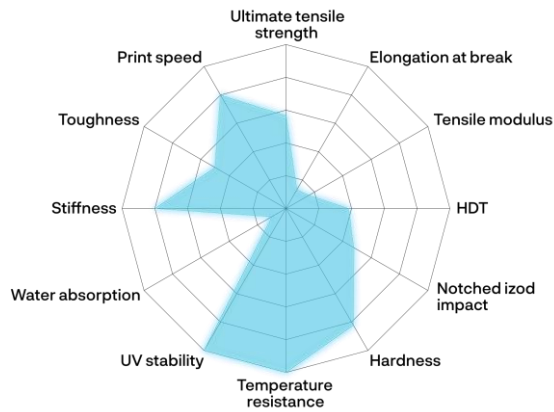
CATEGORY

TOUGH

GENERA.



MATERIAL STATUS



MECHANICAL DATA

Young's Modulus	1610 MPa
Tensile Strength	55 MPa
HDT	107 °C
Elongation at Break	25 %
IZOD Impact	35 J/m
Shore Hardness	79 D

PROPERTIES

High heat deflection temperature
Tough and durable
Glossy surface finish

APPLICATIONS

Interior applications in automotive
Tooling and fixtures
Machinery components

MATERIAL

Ultracur3D ST45

CATEGORY

TOUGH

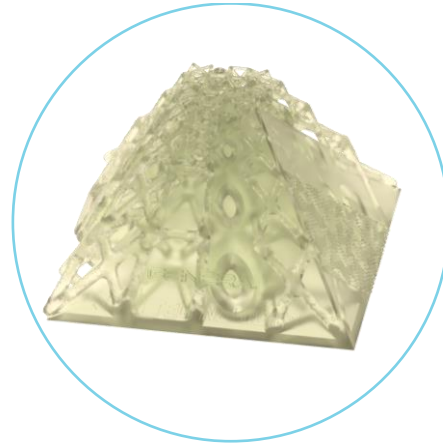
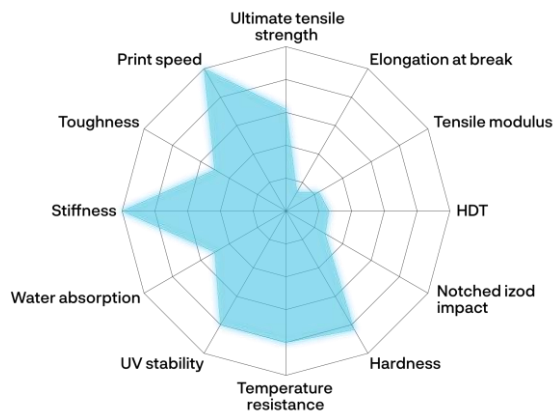
MATERIAL STATUS



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MECHANICAL DATA

Young's Modulus	2300 MPa
Tensile Strength	60 MPa
HDT	63 °C
Elongation at Break	21%
IZOD Impact	20 J/m
Shore Hardness	80 D

PROPERTIES

Combination of high strength, toughness, and impact resistance
Fast printing
Good surface finishing

APPLICATIONS

Housings
Prototyping
High details and texture parts

MATERIAL

Ultracur3D ST45B

CATEGORY

TOUGH

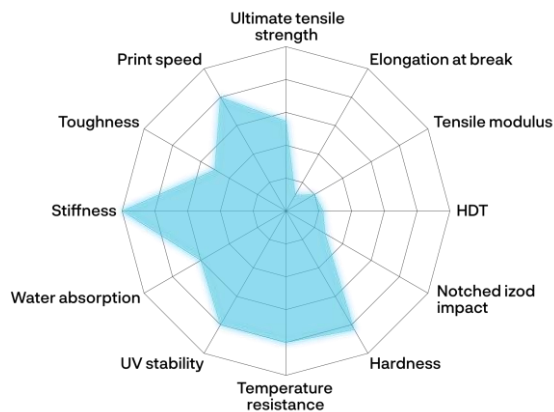
MATERIAL STATUS



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MECHANICAL DATA

Young's Modulus	2000 MPa
Tensile Strength	53 MPa
HDT	63 °C
Elongation at Break	21 %
IZOD Impact	20 J/m
Shore Hardness	80 D

PROPERTIES

High strength, toughness, and impact resistance
Fast printing
Good surface finishing

APPLICATIONS

Housings
Prototyping
High details and texture parts

MATERIAL

Ultracur3D RG35

CATEGORY

RIGID

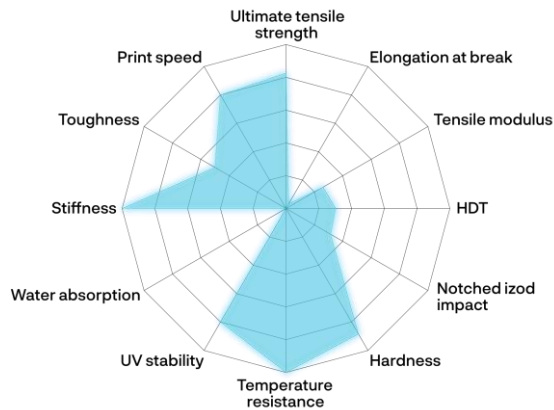
MATERIAL STATUS



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MECHANICAL DATA

Young's Modulus	2539 MPa
Tensile Strength	67. MPa
HDT	84 °C
Elongation at Break	3.8 %
IZOD Impact	10 J/m
Shore Hardness	85 D

PROPERTIES

Very high stiffness
High temperature resistance
High accuracy and low shrinkage
Low water uptake
Easy to polish

APPLICATIONS

Automotive housings
Jigs and fixtures
Molds and inserts
Electrical casings

MATERIAL

Ultracur3D RG35B

CATEGORY

RIGID

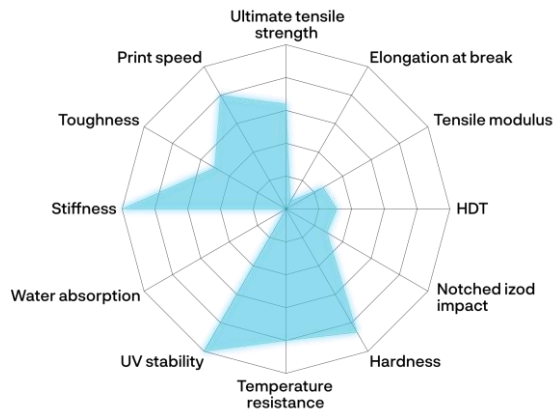
MATERIAL STATUS



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MECHANICAL DATA

Young's Modulus	2600 MPa
Tensile Strength	62 MPa
HDT	87 °C
Elongation at Break	10 %
IZOD Impact	21 J/m
Shore Hardness	83 D

PROPERTIES

Very High Stiffness
High Temperature Resistance

APPLICATIONS

Automotive Housings
Jigs & Fixtures
Molds & Inserts
Electrical Castings

MATERIAL

Ultracur3D RG1100

CATEGORY

RIGID

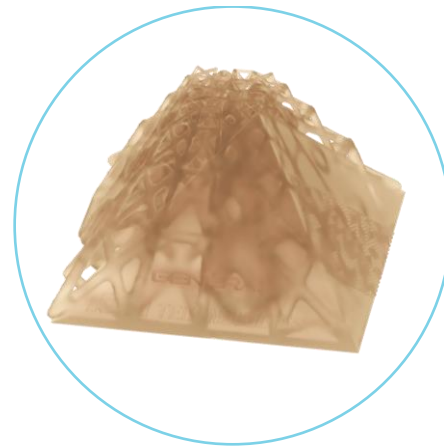
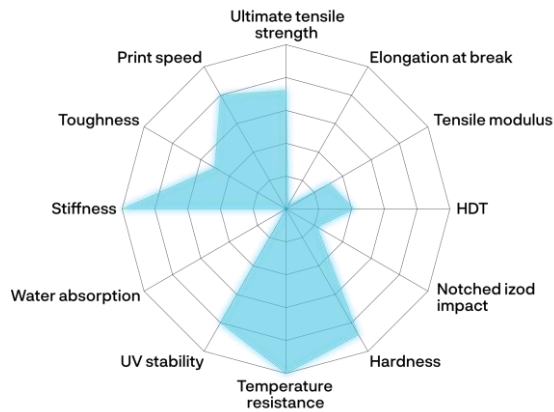
MATERIAL STATUS



GENERA.

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MECHANICAL DATA

Young's Modulus	3080 MPa
Tensile Strength	70 MPa
HDT	116 °C
Elongation at Break	5 %
IZOD Impact	16 J/m
Shore Hardness	85 D

PROPERTIES

Very high stiffness
High temperature resistance
Very high chemical resistance
Low water uptake

APPLICATIONS

Automotive connectors
Demanding engineering parts
Exterior covers
Brackets and housings

MATERIAL

Ultracur3D RG1100B

CATEGORY

RIGID

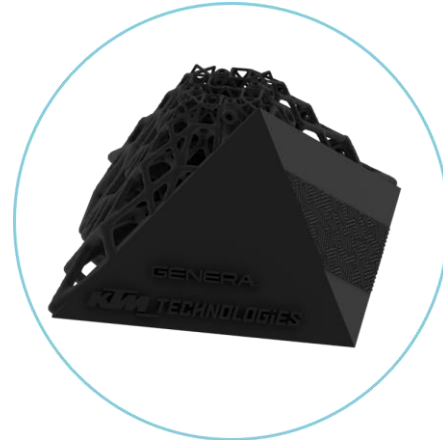
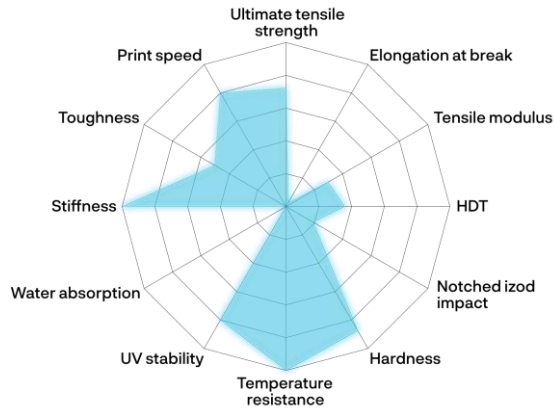
MATERIAL STATUS



GENERA.

BASF
We create chemistry

FORWARD 3D
Innovating Additive Manufacturing



MECHANICAL DATA

Young's Modulus	2950 MPa
Tensile Strength	70 MPa
HDT	100 °C
Elongation at Break	5 %
IZOD Impact	14 J/m
Shore Hardness	84 D

PROPERTIES

Very high stiffness
High temperature resistance
Very high chemical resistance
Low water uptake

APPLICATIONS

Automotive connectors
Demanding engineering parts
Exterior covers
Brackets and housings

MATERIAL

Ultracur3D RG3280

CATEGORY

RIGID

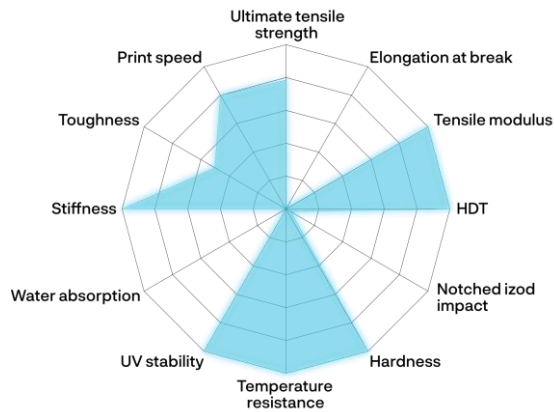
MATERIAL STATUS



GENERA.

BASF
We create chemistry

FORWARD
Innovating Additive Manufacturing



MECHANICAL DATA

Young's Modulus	10000 MPa
Tensile Strength	76 MPa
HDT	>280 °C
Elongation at Break	1%
IZOD Impact	2,36 J/m
Shore Hardness	96 D

PROPERTIES

Ceramic Composite Material
High Heat
Low Viscosity
Very Easy to Print and Handle

APPLICATIONS

Tooling
Moulding
Wind Tunnel Testing

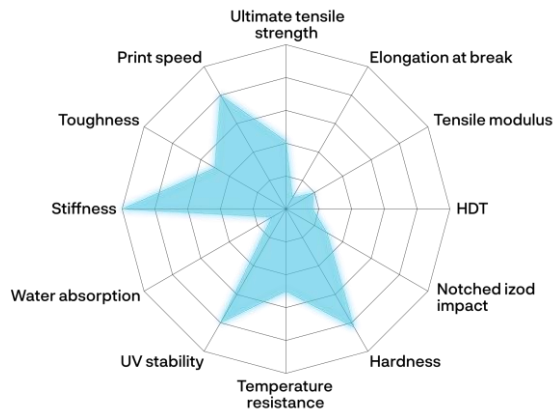
MATERIAL

SSYS DM200

CATEGORY

RIGID

MATERIAL STATUS



MECHANICAL DATA

Young's Modulus	2000 MPa
Tensile Strength	40 MPa
HDT	45 °C
Elongation at Break	15 %
IZOD Impact	21 J/m
Shore Hardness	80 D

PROPERTIES

High Throughput
Fast Printing Times
High Accuracy
Low Viscosity

APPLICATIONS

Dental Model Applications

*not compatible with G1 / F1 system

MATERIAL

INFINAM RG2000L

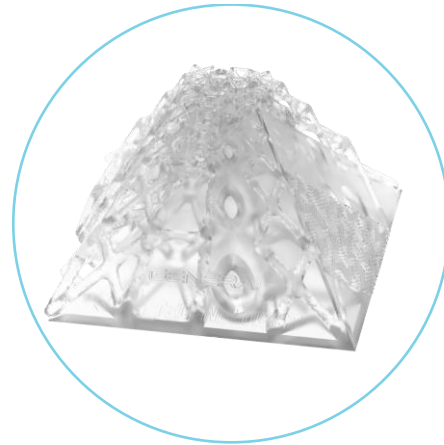
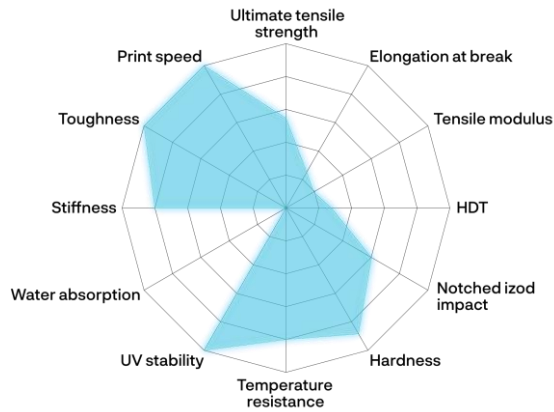
CATEGORY

RIGID

MATERIAL STATUS



GENERA.



MECHANICAL DATA

Young's Modulus	1940 MPa
Tensile Strength	53 MPa
HDT	78 °C
Elongation at Break	48 %
IZOD Impact	44 J/m
Shore Hardness	85 D

PROPERTIES

High Toughness
Low Water Absorption
Low Yellowing

APPLICATIONS

Functional Prototyping
Eyewear
Microfluidic Reactors

MATERIAL

INFINAM ST3101L

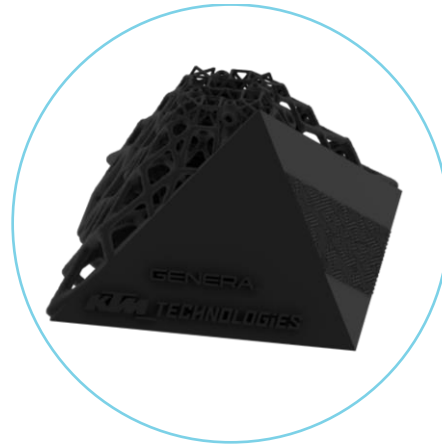
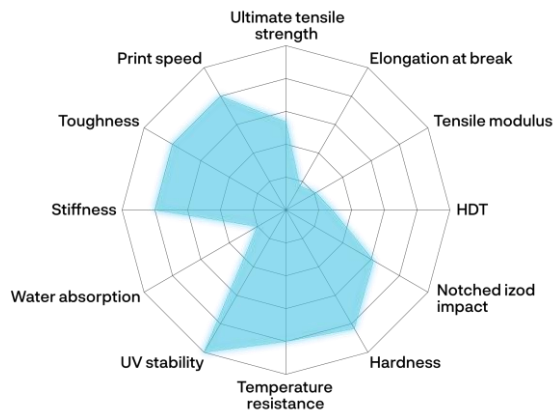
CATEGORY

RIGID

MATERIAL STATUS



GENERA.



MECHANICAL DATA

Young's Modulus	2100 MPa
Tensile Strength	52 MPa
HDT	120 °C
Elongation at Break	79 %
IZOD Impact	45 J/m
Shore Hardness	80 D

PROPERTIES

High impact resistance
High temperature resistance
High Resolution

APPLICATIONS

Industrial components
Automotive parts

MATERIAL

INFINAM ST6100L

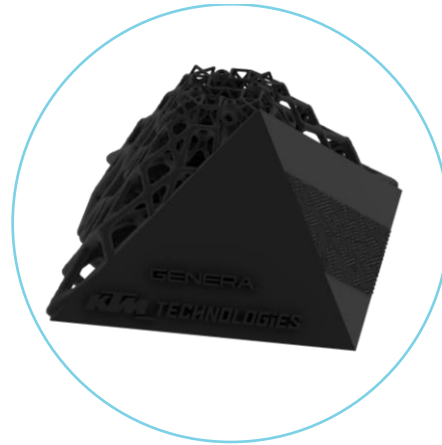
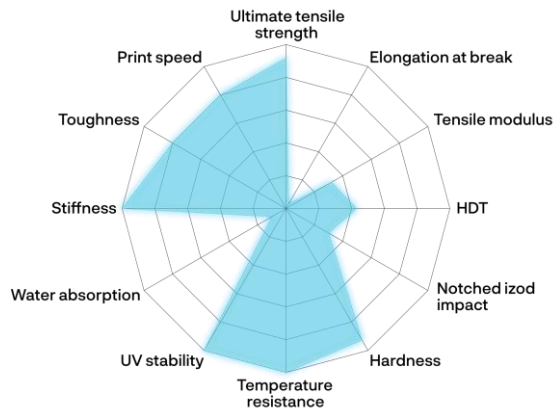
CATEGORY

RIGID

MATERIAL STATUS



GENERA.



MECHANICAL DATA

Young's Modulus	3200 MPa
Tensile Strength	89 MPa
HDT	120 °C
Elongation at Break	6 %
IZOD Impact	22 J/m
Shore Hardness	89 D

PROPERTIES

High tensile strength combined with elongation
High temperature resistance
Very good weatherability

APPLICATIONS

Industrial components
Automotive parts
Molding

MATERIAL

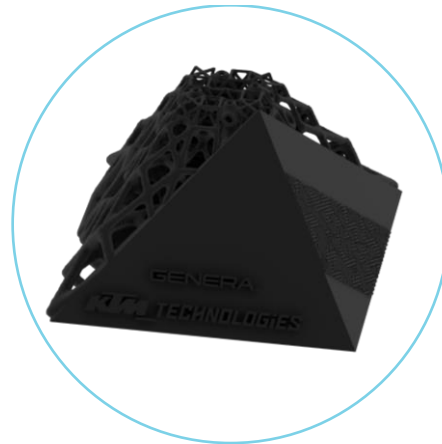
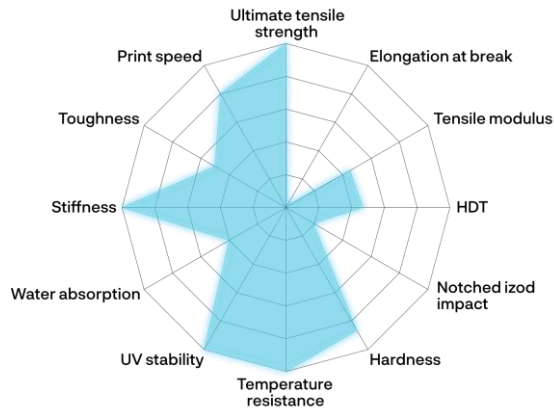
Altana CI4-1000VPB

CATEGORY

RIGID



MATERIAL STATUS



MECHANICAL DATA

Young's Modulus	4500 MPa
Tensile Strength	97 MPa
HDT	120 °C
Elongation at Break	2,7 %
IZOD Impact	n.a.
Shore Hardness	83 D

PROPERTIES

Flammability, Vertical (@3.2mm) V-0
High temperature resistance
High Temperature Resistance

APPLICATIONS

Electrical Connectors
Applications that require Flame Retardant Properties

MATERIAL

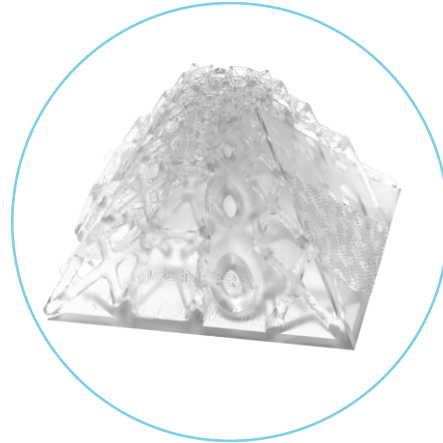
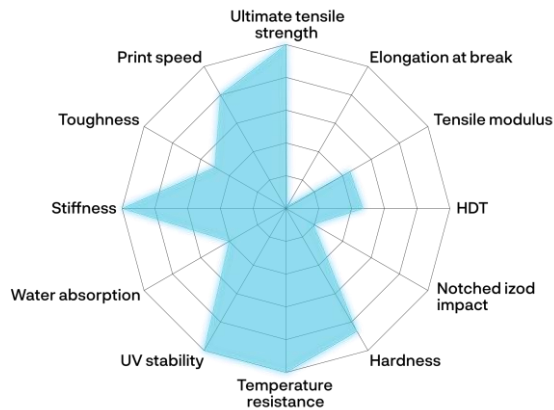
Altana CI4-1000VPC

CATEGORY

RIGID



MATERIAL STATUS



MECHANICAL DATA

Young's Modulus	4500 MPa
Tensile Strength	97 MPa
HDT	120 °C
Elongation at Break	2,7 %
IZOD Impact	n.a.
Shore Hardness	83 D

PROPERTIES

Flammability, Vertical (@3.2mm) V-0
High temperature resistance
High Temperature Resistance

APPLICATIONS

Electrical Connectors
Applications that require Flame Retardant Properties

MATERIAL LIBRARY

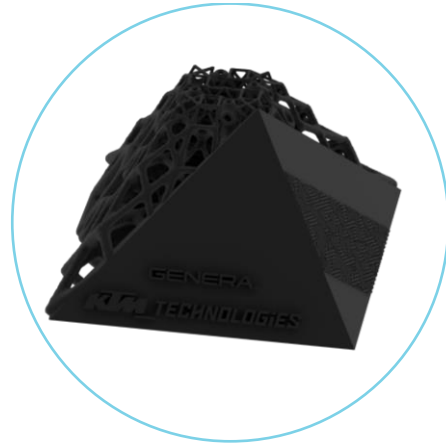
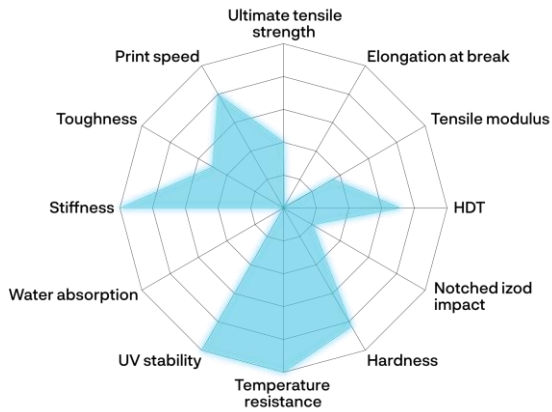
Loctite 3D 3860

CATEGORY
RIGID

MATERIAL STATUS



GENERA.



MECHANICAL DATA

Young's Modulus	3500 MPa
Tensile Strength	39 MPa
HDT	>200 °C
Elongation at Break	2 %
IZOD Impact	n.a.
Shore Hardness	80 D

PROPERTIES

No deformation
Durable
Survives longer to temperature stress
Easy to print with high print resolution

APPLICATIONS

Functional prototyping
Encapsulation
Mounts and housings

MATERIAL LIBRARY

Loctite 3D IND147

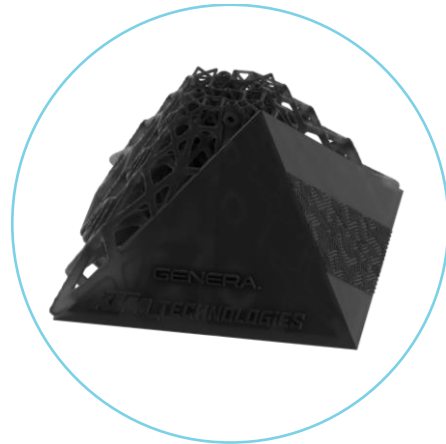
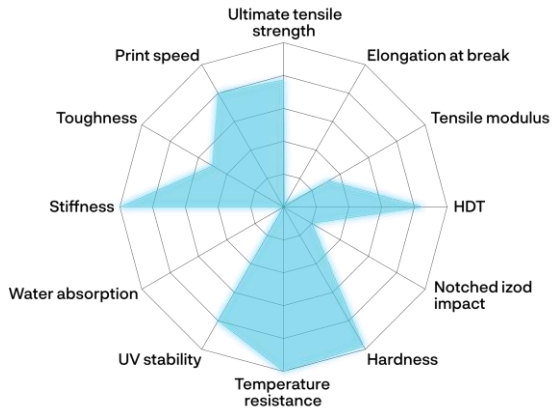
CATEGORY

RIGID

GENERA.



MATERIAL STATUS



MECHANICAL DATA

Young's Modulus	3200 MPa
Tensile Strength	75 MPa
HDT	238 °C
Elongation at Break	3 %
IZOD Impact	14.6 J/m
Shore Hardness	94 D

PROPERTIES

High heat deflection temperature
Good dimensional stability
Good surface finish
Sufficient toughness

APPLICATIONS

Tooling applications
Molds

*not compatible with G1 / F1 system

