# Polymer Materials Portfolio Overview



#### Preferred Materials - Print process parameters available from innovatiQ

Product Name	Description and key benefits	Printing system	Article No.	Support Structure	Available Colors	Available quantity & price
Shin-Etsu Silicone KEG- 2003H 30A A&B	Pure injection molding liquid silicone rubber (LSR) with low volatile content and good transparency, medically approved, suitable for 30 days implantable (Shore 30A), Approvals for REACH, RoHS, Food contact BfR/FDA, Drinking water contact, Medical IISO10993, USP Class6, milking industry, pharmaceutical EP 3.1.9, flame retardant UL-94 HB	LiQ320	800360	NA	Transparent (colors additionally for LiQ5)	1.2Kg Kit @ 199€
		LiQ5	800363			
Shin-Etsu Silicone KEG 2003H 50A A&B	Pure injection molding liquid silicone rubber (LSR) with low volatile content and good transparency, medically approved, suitable for 30 days implantable (Shore 50A), Approvals for REACH, RoHS, Food contact	LiQ320	800361	NA	NA Transparent (colors additionally for LiQ5)	
	BfR/FDA, Drinking water contact, Medical IISO10993, USP Class6, milking industry, pharmaceutical EP 3.1.9, flame retardant UL-94 HB	LiQ5	800362			
ABS Material4Print Natur	Very good impact and scratch resistant, high- speed printing, Compatible with soluble support filament, Temperature resistance up to 80°C Additional accessories • Magigoo standard glue	TiQ5	-	Breakaway	Milky White	-
ASA-CF Durapro extrudr	Weatherproof and UV-resistant copolymer for industrial applications. Optimised for good layer adhesion, thermal stability, better flow properties and lower warping.	TiQ2	-	Breakaway	Black	-
	Additional accessories  • Magigoo standard glue					
IGUS iglidur i150-PF	Easy to process tribo filament, Self- lubricating, Suitable for food contact due to conformity to EU 10/2011, Temperature resistance up to 65°C.	TiQ2	-	Breakaway	Milky White	-
PA-CF Fiberthree F3 Pro	15 weight-% carbon fiber, good wear resistance, Good chemical resistance, For prototypes and small series in fixture construction, Equipment construction, low	TiQ2	100626	Breakaway, Soluble	Black	1Kg @ 175€
	warping effect, Heat resistance of 120°C  Additional accessories  • Magigoo PA glue	TiQ5		Breakaway, Soluble		

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PET BASF Ultrafuse	Chemical resistant, Impact-resistant and dimensionally stable, Cost effective, 100% recyclable and sustainable. Made from food contact approved raw material.	TiQ5, TiQ2	102009	Breakaway, Soluble	■ Black	750g @ 25€
	No build chamber heating is required.  Additional accessories  Magigoo standard glue	TiQ2		Breakaway		
PET CF15 BASF Ultrafuse	Very good impact resistance and dimensional stability, Higher mechanical strength, Easy to process PET with 15% carbon fiber, very low moisture absorption, Heat resistance up to 108°C	TiQ2	102012	Breakaway, Soluble	■ Black	750g @ 70€
PETG-ESD Polymaker	Combines the toughness of PETG with the electrostatic dissipation function, compounded with carbon nanotubes, ESD property offers protection to delicate electronics during the electronic assembly processes  Additional accessories  Magigoo standard glue	TiQ2	-	Breakaway	Black	-
PLA PRO1 BASF Ultrafuse	Cost effective, Easy to print.  No build chamber heating is required.  Additional accessories  Magigoo standard glue	TiQ2	102011	Breakaway	Milky White	750g @ 35€
PP Fiberthree PP- GF25	Made for industrial & automotive end use parts, Good chemical resistance, no water absorption, high resistance to breakage, impact and wear, 25% Glass fiber creates stiff parts.  No build chamber heating is required.  Additional accessories  Magigoo PP glue	TiQ2	102013	Breakaway	■ Black	750g @ 90€
High performance polymer for injection molding tool inserts	High performance polymer with 15% added carbon fibers, Excellent heat resistance. Ideal for tool insert creation.  Additional accessories  HT Hotend Magigoo HT glue	TiQ2	102018	Breakaway	Black	750g @ 225€
TPU 95A Thermoplastic polyurethane Red	84% greater impact strength than ABS, 580% elongation capability, Chemical resistant to Naphtha, ASTM Oils #1-3, Petroleum and Freon.  No build chamber heating is required.  Additional accessories  Magigoo standard glue	TiQ2	100615	Breakaway, Soluble Breakaway, Soluble	Red	500g @ 50€

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aquatiQ 20 Soluble Support Material	Compatible with PA, PET, TPU and ABS.  Additional accessories  Xioneer Vortex EZ support removal station	TiQ2, TiQ5, TiQ8	100712	-	☐Milky White	1Kg @ 199,9€
aquatiQ Detergent	Removal agent for aquatiQ support material  Additional accessories  • Xioneer Vortex EZ support removal station	NA	100713	-		1Kg @ 21,9€

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#### Compatible Materials – Material qualification and print process development on customer request

Product class	<b>Product Name</b>	Key Benefits	Printing system
ABS	Material4Print ABS Natur	Suitable for end use colored parts.	TiQ8
PC	Sabic PC Lexan Black	Strong, dimensionally stable, heat-resistant filament notable for its high impact strength. High compression strength makes it suitable for short run metal-forming dies. High heat resistance up to 130°C.	TiQ8
	Polymaker PolyMax PC Black	Entry level PC filament combining excellent strength, toughness, heat resistance and printing quality. With a softening point of 113°C makes it ideal for demanding applications.	TiQ8
PC/ABS	BASF Ultrafuse PC/ABS FR Black	Blend of Polycarbonate and ABS, halogen free flame retardant, Fulfills flame retardancy according to UL 94 V-0 (for 1.5 & 3.0 mm thickness)	TiQ8
ESD ABS	Material4Print ESD-ABS	Protects against electrical discharge, Cases for electronic components, $10^7$ to $10^9$ Ohms/m <sup>2</sup> surface resistivity Required build chamber temperature: 80°C	TiQ5, TiQ8
PA	TREED PA HP Natural - White	Unfilled Nylon. Very low warping effect, Moderate water absorption	TiQ5, TiQ8
ASA	BASF Ultrafuse ASA	UV stable, Low gloss and high outdoor weather resistance. Required build chamber temperature: 80°C	TiQ5, TiQ8
Polypropylene	PPprint P- filament 721#	Food safe, Certified for DIN EN ISO 10993-5 for biological safety.	TiQ2, TiQ5, TiQ8
PEKK	Ensinger TECAFIL PEKK Natural	Inherent flame retardant, Good dimensional stability, High heat deflection temperature, High thermal and mechanical properties	TiQ8
PVDF	PVDF	Excellent corrosion resistance, UV resistant, Excellent build plate adhesion, Suitable for CNC machine the printed part	TiQ5, TiQ8
PPS CF	Lehvoss Luvocom PPS CF	Chemical and corrosion resistant plastic material, 15% embedded carbon fiber to produce stiff parts.	TiQ5, TiQ8
iglidur	IGUS iglidur i150- PF	Easy to process tribofilament, Material enriched with solid lubricants, Suitable for food contact due to conformity to EU 10/2011, Temperature resistance up to 65°C.	TiQ5, TiQ8
TPU	Extrudr TPU Medium 98A red	Very impact and break-resistant, halogen-free, free from silicone, plasticizers and oils, extreme layer adhesion	TiQ2
ULTEM 9085	TECAFIL PEI 9085	Inherently flame-retardant high-performance filament, with high mechanical strength and chemical resistance	TiQ8
PC-GF	TECAFIL PC FRT GF10	High temperature, glass fiber reinforced flame retardant (R1 classification) filament based on polycarbonate. Ideal for components that have to withstand mechanical stress and a wide temperature range.	TiQ8

# Maximum available print volume is 150mm X 150mm X 150mm located in the center of the build plate. Printability could vary based on part geometry.