



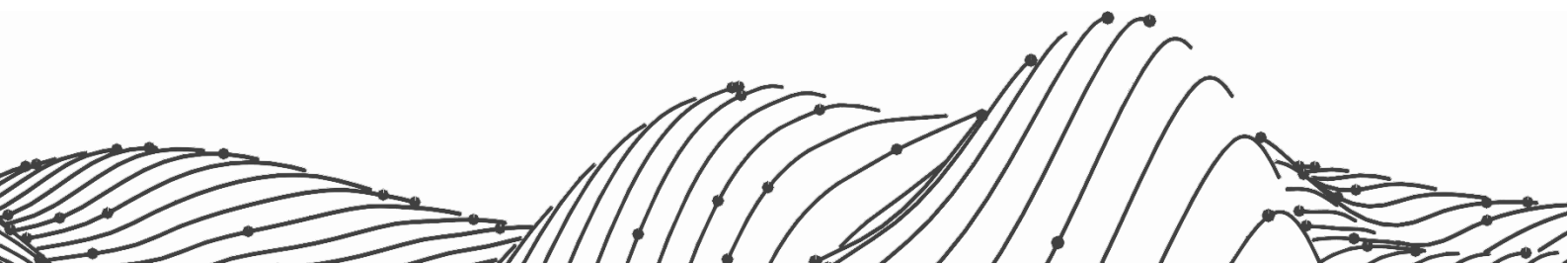
KREI CORE HF

KREI CORE HF is a copolyester specially developed for 3D printing. Available in several translucent and solid colors, it is ideal for those who want decorative and functional prints with high mechanical and chemical resistance, excellent surface quality, dimensional stability, lightness and ease of printing. This filament can be used to print waterproof and watertight parts. It can be used in any printer that operates at temperatures between 245°C - 300°C and has a heated bed.

DIFFERENTIALS OF **KREI CORE HF**:

- Superior combination of mechanical properties (tension, flexion and impact) vs. PLA, PLA REVOLUTION HF, PLA REVOLUTION CARBON HF, ABS, ASA, PETG, PCTG, PET and CPE;
- Superior chemical resistance vs. other polymers, enabling the use of solvents, acids and alkalis, facilitating the painting and finishing process;
- Superior thermal resistance vs. PLA, PLA REVOLUTION HF, PLA REVOLUTION CARBON HF, PETG, PET, PCTG and CPE;
- High resistance to U.V rays;
- Low shrinkage rate;
- Does not emit toxic vapors during processing (no odor);
- Can be printed at high speeds;
- Does not require a closed chamber for printing;
- Excellent adhesion between layers, allowing parts to be sanded, drilled and machined without peeling;
- Excellent adhesion to the printing table, not requiring the use of adhesives/glues;
- Free from warping during the printing process;
- Features an excellent high gloss and transparency finish (in translucent colors);
- May come into contact with food;
- Wide processing temperature range: 245 - 300°C.

This material has a degree of hygroscopicity; once opened, the filament will absorb moisture from the air. If this happens, it can be dried at 65°C for 4 hours to completely remove water molecules.



Due to its mechanical, thermal and chemical resistance, this filament can be used for any type of printing, including functional parts. This filament can be used to print waterproof and watertight parts.

IDENTIFICATION	
Comercial name	KREI CORE HF
Chemical name	Copolyester
Aplication	FFF 3D printing
Diameter (mm)	1,75±0,05 / 2,85±0,05
Manufacturer	SPALC INDUSTRIAL

MECHANICAL PROPERTIES	KREI CORE HF
Specific gravity (g/cm ³)	≈ 1,24
Softening temperature (°C)	≈ 85
Tensile stress at yield (MPa)	≈ 60
Elongation at break (%)	≈ 23
IZOD impact resistance (entahado kJ/m ²)	≈ 8
Flexural Strength (MPa)	≈ 80
Hardness (shore D)	≈ 85

PARAMETERS FOR FFF PRINTING WITH KREI CORE HF		
PARAMETER	STANDARD	RANGE
Nozzle temperature (°C)	260	245 a 300
Bed temperature (°C)	75	60 a 90
Print speed (mm/s)	300	40 a 600
Nozzle diameter (mm)		≥ 0,1
Recommended layer height (mm)		≥ 0,05
First layer print speed (mm/s)	60	40 a 80
First layer fan speed (%)		0
Model fan speed (%)	30	0 a 60

- The aforementioned values may vary according to the analysis methodology used;
- The parameters described above may vary depending on the printer model to be used and slicing conditions;
- It is recommended to use a thermal insulator for the heat block.

