

Technical Data Sheet

HIPS-X Filament

The material offered by Spectrum Group Sp. z o.o. has been developed and adapted to general modeling. Tests performed by Spectrum Group have showed that it is feasible to use the offered product in most 3D printers operating in FDM/FFF technology available on the market. Before the first use, it is advisable to print out a hard proof to check if the filament is compatible with your 3D printer.

| Physical properties | Typical value | Test Method |
|-------------------------------|---------------|-------------|
| Material density | 1.05 g/cm³ | ISO 1183 |
| Melt Flow Rate (200°C, 5.0kg) | 0.60 | ISO 60 |
| Dimensional tolerance | ± 0.05mm | |

| Mechanical properties | | Typical value | Test Method |
|-----------------------|--------------------|---------------|-------------|
| Tensile Strength | | 16 Mpa | ISO 527-2/5 |
| Tensile Elongation | | 6% | ISO 527-2/5 |
| Flexural Modulus | | 2000 Mpa | ISO 178 |
| Flexural Strength | | 50 Mpa | ISO 178 |
| Notched Izod Impact | Compression Molded | 90 J/m | ASTM D256 |

| Thermal properties | | Typical value | Test Method |
|-------------------------------------------|----------|---------------|--------------|
| Heat Distortion Temperature (annealed) | 0.45 Mpa | 88°C | ISO 75-2/B |
| | 1.8 Mpa | 84°C | ISO 75-2/A |
| Vicat Softening Temperature | | 96°C | ISO 306/A120 |
| vicat softening remperature | | 87°C | ISO 306/B50 |









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| Electrical properties | Typical value | Test Method |
|-----------------------------|---------------|-------------|
| Dielectric Constant (1 MHz) | 2.50 | ASTM D150 |
| Dissipation Factor (1 MHz) | 0.00040 | ASTM D150 |

| Flammability | Typical value | Test Method |
|--------------------------|---------------|-------------|
| Flame Rating UL (1.60mm) | НВ | UL 94 |

| Printing properties | Typical value | Test Method |
|----------------------|---------------|-------------|
| Printing temperature | 230-245°C | |
| Bed temperature | 100°C | |



Technical data is provided according to the data of the base material and it is for information only.

