



TECHNICAL DATASHEET

PRODUCT CODE: G-LEAF Polymer 01302

PRODUCT DESCRIPTION:

Graphene-reinforced polyphenylsulfone (PPSU) thermoplastic composite with high elongation at break and impact resistance. Granules (or powder) for injection moulding and extrusion.

FUNCTIONAL ADDITIVES: G-LEAF FEW-LAYER GRAPHENE (FLG)*

MATERIAL PROPERTIES

	Conditions	Test Method	Units	Value
Mechanical data				
Tensile Strength	Yield, 23°C	ASTM D638	MPa	60
Tensile Elongation	Yield, 23°C	ASTM D638	%	7
	Break, 23°C	ASTM D638	%	69
Young Modulus	23°C	ASTM D638	GPa	2.3
Flexural Modulus	23°C	ASTM D790	GPa	2.4
Charpy Impact Strength	Double notch, 23°C	ASTM D6110	kJ/m ²	79
Thermal data				
Melting Point		ASTM D7138	°C	218
Glass Transition Temperature	Onset	ASTM D7138	°C	143
Thermal Conductivity	23°C	ISO/DIS 22007-2.2	W/(mK)	0.24-0.25
Processing parameters				
Drying temperature/time		140°C/2.5h		
Extrusion Temperature		345-375°C		
Mould Temperature		138-163°C		

*Produced by BeDimensional and compliant with **ISO/TS 80004-13:2017** and **ISO/TS 21356-1:2021**



BEDIMENSIONAL
GRAPHENE AND 2D CRYSTALS

STORAGE

The product must be stored in accordance with national regulations. Keep the containers in a dry, cool, well-ventilated space and away from sources of heat and ignition. Containers must be kept tightly closed. Handle with care.

SAFETY PRECAUTIONS

Comply with all local safety, disposal and transportation regulations. Check the Material Safety Data Sheet (MSDS) and label of the individual products carefully before using the products. The MSDS are available on request.

TECHNICAL SUPPORT

Contact us regarding any questions, improvement suggestions, or problems with this product. More information can be found at www.bedimensional.com or upon request.

DISCLAIMER

Data, specifications, directions and recommendations given in this data sheet represent test results or experience obtained under controlled or specially defined circumstances. Their accuracy, completeness or appropriateness under the actual conditions of any intended use is not guaranteed and must be determined by user.

BeDimensional cannot guarantee anything but the quality of the product itself. Minor product variations may be implemented in order to comply with specific requirements. BeDimensional reserves the right to change the given data without further notice.

Users should always consult BeDimensional for specific guidance on the general suitability of this product for their needs and specific application practices.

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