



TECHNICAL DATASHEET

MATERIAL: G-LEAF Coating 00201

PRODUCT DESCRIPTION

Concentrates additive based on sterically stabilized BeDimensional's FLG and suitable rheological additives dispersed in n-butyl acetate, specifically designed to provide functionalities to medium polarity solventborne systems. Its highly engineered formulation allows for a high dispersibility in compatible systems, even at low shear rates.

Among the possible uses, it can be of particular interest for functional and smart paints&coatings, textile finishing, solution processed polymeric compounds and/or surface treatment industries.

FUNCTIONAL ADDITIVES:

FEW-LAYER GRAPHENE (FLG)*

APPLICATIONS

- Thermally dissipating coatings and films
- Anti-static/dissipative coatings and films
- Aging protective coatings on different substrates
- Anti-abrasion coatings
- Other uses where thermal management and/or substrate protection are required
- Other uses where low electrical conductivity is required

BENEFITS

- Maintains or even improves the mechanical performance of the matrix
- Low dosages enable significant improvements in one or multiple functionalities
- Ensures plain compatibility with common medium polarity systems
- Ensures a straightforward ease of processing and integration in industrial processes and products
- Does not change the chemical and thermal properties of the host matrix

MATERIAL PROPERTIES

PHYSICAL PROPERTY	METHOD	VALUE/DESCRIPTION	UNITS
APPEARANCE	Visual	Dark grey dispersion	-
VISCOSITY			
FLG CONCENTRATION	TGA	10 ± 0.5	%wt
DENSITY	ASTM D1475		g/cm ³
FINENESS OF GRIND	ASTM D1210		

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



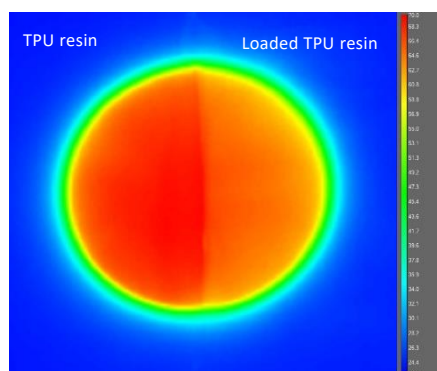
TYPICAL FORMULATION

G-LEAF Coating 00201 can be used in medium polarity solventborne mono- or multi-component systems.

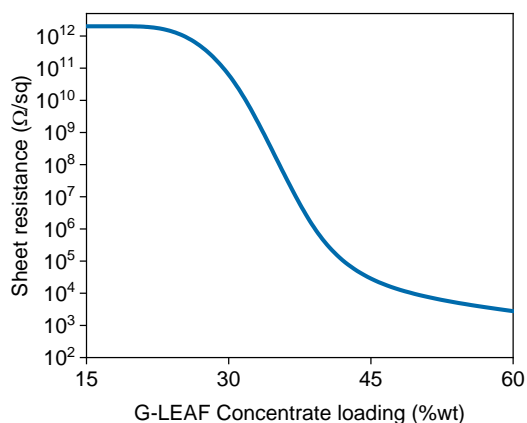
Depending on the characteristics of the host matrix and the processing conditions, the loading of the concentrate for thermal and protective applications can be as low as 5-15%wt based upon the total formulation. Suggested loadings of concentrate for a charge dissipation effect fall in the range of 20-50%wt.

The above recommended levels can be used for orientation. Optimal levels and compatibility with the host system must be determined through a series of laboratory tests.

For optimum performance, the product must be well homogenized via a mechanical stirrer or agitator before use and after incorporation in the host matrix.



Thermal management effect of a TPU resin (25%wt solid content) with 10%wt loading of G-LEAF Coating concentrate (10 μ m layer thickness).



Sheet resistance measured on 10 μ m thick layer as a function of the loading of G-LEAF Coating concentrate in a TPU resin with 25%wt solid content.

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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