

General Description

AeroBlend-ABSMB is an ABS-based masterbatch containing approximately 30% reduced graphene oxide for film, 3D printing, and injection molding applications. This material is specifically engineered to enhance dielectric properties, mechanical strength, and thermal properties in various applications. Its optimized formulation ensures uniform dispersion of reduced graphene oxide within the polymer matrix, providing consistent performance across a range of processing conditions.

AeroBlend-ABSMB can be utilized in different concentrations depending on specific application requirements. The recommended concentration varies based on the target properties, ensuring that the mechanical and electrical enhancements align with the intended use.

Physical Properties

Density: 1.05 - 1.2 g/cm³
Physical Appearance: Black-colored granules

Graphene Solids in ABS

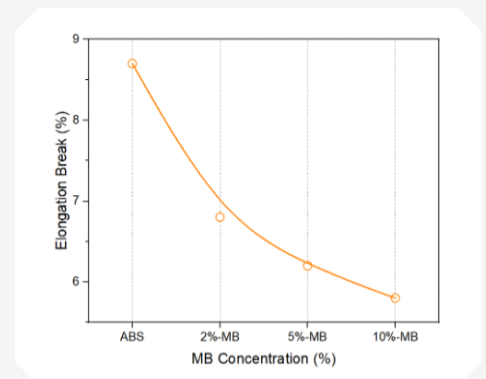
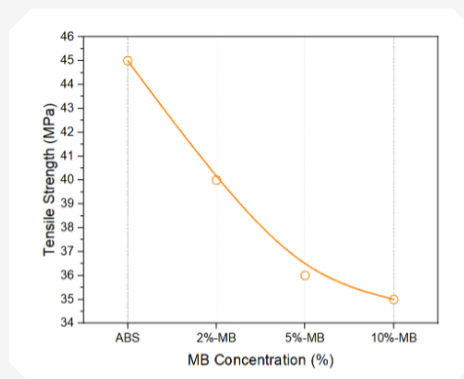
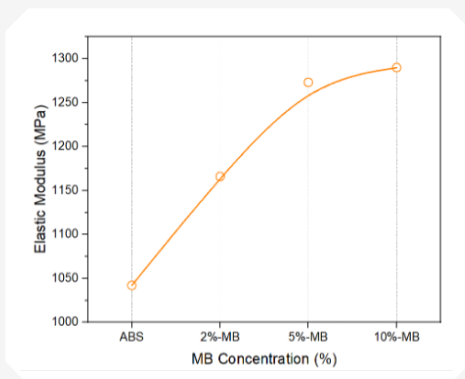
The addition rate may vary based on customer requirements. For detailed information, please get in touch with us.

Carrier Resin

ABS (Acrylonitrile Butadiene Styrene)

Mechanical Properties for Film Applications

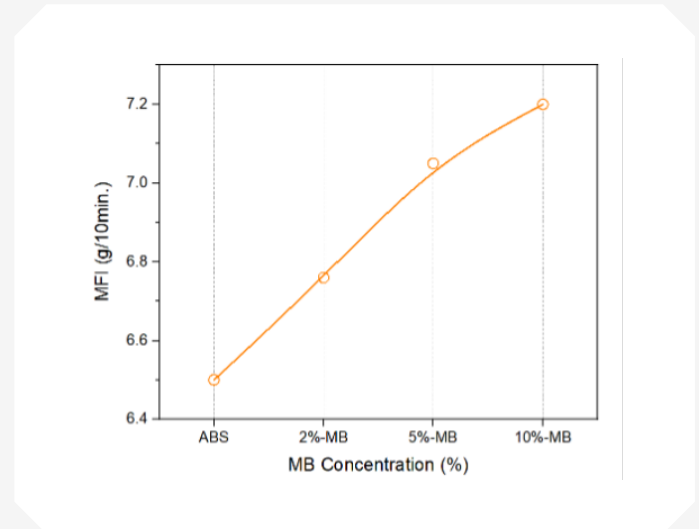
In a PS-based system, it has been observed that incorporating the masterbatch improves the maximum stress and elastic modulus, making the material more suitable for applications requiring higher strength.



Rheological Properties

The layered structure of reduced graphene oxide in AeroBlend-PPMB facilitates processing more effectively than many other fillers or additives. Unlike many other fillers or additives, no significant impact on the melt viscosity has been observed with the use of reduced graphene oxide masterbatch.

**This technical data sheet contains preliminary data for an R&D product under development. The specifications and performance values provided are based on experimental results and may be subject to change during the final production process. As the product transitions to mass production, its properties will be finalized and aligned with relevant standards, and an updated TDS document will be prepared.*



Processing Guidelines

- AeroBlend-ABSMB does not require any additional special feeding methods.
- It is suitable for use at standard ABS processing temperatures.
- This masterbatch is compatible with ABS and its derivatives.
- For optimal results, a twin-screw extruder is recommended for preliminary mixing.
- Drying before processing is recommended to ensure the best performance.

These parameters serve as general guidelines. Process parameters should be adjusted according to specific equipment and application needs. The values in this datasheet are based on typical measurements conducted by us and should not be considered definitive product specifications. Aerofen reserves the right to modify the content and format of this document at any time. Customers are responsible for verifying and qualifying the product for their specific processes, ensuring compliance with regulatory requirements and potential patent issues.

Availability & Packaging

Delivered in bags of varying sizes according to customer demand. Please contact us for inquiries regarding quantities.

Storage

It is advised that products are kept sealed and stored in cool, dry conditions.



Are you curious to learn more about
AeroBlend® MB Products or a possible collaboration?

Contact our team at info@aerofen.com