
PureGRAPH® MB-LDPE

Graphene enhanced LDPE masterbatch

Function

PureGRAPH® MB-LDPE is a graphene carrier masterbatch, designed for blending with a number of thermoplastic materials.

Description

PureGRAPH® MB-LDPE is a graphene enhanced polyethylene masterbatch, which utilises First Graphene's few-layer, high-performing graphene additives.



Potential Features and Benefits:

- Easy to use and incorporate into a range of plastics using standard processing techniques.
- Easy to handle masterbatch in plastic chip/pellet format.
- Low inherent water content due to hydrophobic polyolefin carrier.

Typical Applications

This is a graphene masterbatch, designed for use in polyolefin systems including polyethylene and polypropylene. May also be used in polyamide and acetal polymers. Addition rate is subject to customer trial and approval.

Typical Product Parameters

PureGRAPH® MB-LDPE	5-30	10-30	20-30	50-30
Graphene particle size (D _v 50 ¹)	5 µm	10 µm	20 µm	50 µm
Composition % w/w (Graphene solids in PE)			30	
Carrier resin			Polyethylene	
Carrier resin MFI (g/10 min)			20 to 50 (nominal)	

Masterbatch

Specific gravity			0.97 (nominal)	
Recommended LDR (%)			2.0	
Moisture content at packing (%)			<0.2	
Heat stability (°C)			260-280	
Light fastness (Blue wool scale 1-8)			>7	

Availability & Packaging

Samples: 50g - 500g supplied in screw cap containers
Bulk volume: Sealed foil bags

Storage

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

Handling Information

Please consult material safety data sheet (MSDS) for additional handling information.

¹ D_v50 volumetric average, measure by a laser diffraction technique.

LIMITED WARRANTY INFORMATION:

The information contained herein is offered in good faith and is believed to be accurate at the time of printing. This information should not be used as a substitute for your own quality control and/or testing procedures to ensure that our products are safe, effective and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

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