

GRAPHISTRENGTH C M7-20

PA6.6 MASTERBATCH

TECHNICAL DATA SHEET

Description:

Graphistrength C M7-20 is a black PA6.6 masterbatch that contains perfectly dispersed MWNT at a concentration of 20% by weight.

Graphistrength C M7-20 is suited to the production of high performance PA6.6 compounds intended for use in electrostatic discharge (ESD) protection.

Key features:

Graphistrength C M7-20 is provided in pellet form with the following key characteristics.

Property	Method	Unit	Typical value ⁽¹⁾
MWNT content	TGA	wt%	20.0 ⁽²⁾
Moisture content	Karl-Fisher	wt%	0.10-0.15

⁽¹⁾ Data not intended for specification purposes

⁽²⁾ Graphistrength C M7-20 contains Graphistrength C100 MWNT with purity > 90 %

Benefits and applications:

Graphistrength C M7-20 is generally diluted in PA6.6. Typical final MWNT loadings in the final compounds are in the range 1 to 5 wt% depending on the host matrix characteristics, the targeted performances, processing methods and conditions.

The typical electrical resistivity that can be achieved is in the range $10^1 - 10^8$ ohm.cm. The ESD properties obtained with Graphistrength C M7-20 are outstandingly consistent and uniform.

Thanks to their low loading, and very small size, Graphistrength MWNT offer several additional advantages: smooth surface aspect, low increase in density and, high preservation of the neat matrix's ductility and mechanical properties. With low particulate generation, Graphistrength MWNT are also ideal fillers for applications where cleanliness is key.

Graphistrength C M7-20 is particularly suited to industrial and automotive applications.

Dilution and processing:

The dilution of Graphistrength C M7-20 into high quality compounds can be achieved with standard equipments used in thermoplastics compounding such as twin-screw extruders. In some cases, optimizing process conditions may be necessary to get well-dispersed compounds. More information is provided in our *Dilution Guide of Graphistrength Thermoplastic Masterbatches*.

It is recommended to process Graphistrength C M7-20 within the temperature range 280 to 300 °C.

The compounds can be processed on most equipments (extrusion, blow molding, injection molding)

Packaging and Storage:

Graphistrength C M7-20 is provided in lined bags of 5 kg or 25 kg net. The product is indefinitely stable in its unopened original packaging when stored at normal temperatures.

Graphistrength C M7-20 may absorb water if exposed for long periods of time to the atmosphere. In this case, the pellets must be dried at 80 °C preferably under vacuum for 12 to 24 hours before using.

Safety and Handling:

Graphistrength C M7-20 is provided in pellet form where MWNT are strongly embedded.

Graphistrength C M7-20 doesn't present any specific health risk when using in thermoplastic processing.

Consult the product MSDS for additional information on properties, hazards and handling.

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