



Graf-M™ Graphite Masterbatches

Product Overview

NeoGraf Solutions, LLC offers a variety of masterbatches incorporating its Graf-X[™] graphene nanoplatelets, Graf+® graphite powder, and GrafGuard® expandable graphite additives. Graphene, graphite, and expandable graphite additives can be added to polymers to boost their electrical, thermal, mechanical and fire-retardant properties. The use of masterbatches is favored by customers who prefer the convenience of handling pellets rather than powders in their manufacturing processes.



Applications

Graf-M™ masterbatches are used in the building and construction, transportation, automotive and bedding industries

- In the manufacture of insulation boards ("Grey Board") to increase their insulation value and reduce degradation to UV radiation. An increase in insulation value of $\sim 20\%$ can be accomplished with a graphite loading level of $\sim 2-6\%$.
- In the manufacture of polyolefin foams and thermoplastics to increase fire retardancy

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Grade Designations

Material grades have been developed for the insulation board market. Properties of the three grades are available at TDS618.

- Graf-M EPS (01) for expanded polystyrene (EPS) insulation boards
- Graf-M XPS (01) for extruded polystyrene (XPS) insulation boards
- Graf-M XPS (02) for extruded polystyrene (XPS) insulation boards

Properties of the four FR grades are available at TDS617.

The nomenclature is Graf-M FR (resin type) (Onset Temperature (°C)-Mesh Size)

- Graf-M FR (resin) (Grade)
- Graf-M FR (LDPE) (200-100)
- Graf-M FR (LDPE) (210-200)
- Graf-M FR (LDPE) (250-50)
- Graf-M FR (LDPE) (280-50)

Other formulations can be available on request.

Commitment to Excellence

Graf-M Graphite Masterbatches meet or exceed all environmental and quality standards in a sustainable manner.

✓ ISO 9001:2015	√ RoHS	√ California Proposition	√ Lead-fre
√ ISO 14001:2015	✓ Conflict-Free Minerals	65 Compliant	√ REACH

Technical Support

Our global team of Applications Engineers specialize in providing technical support to a wide variety of applications, including the latest high tech devices, fuel cells, industrial gaskets, fire-rated building materials, and LED lighting. With over 135 years of carbon and graphite innovation and leadership, we specialize in the development and manufacture of high quality flexible natural and synthetic graphite sheets as well as expanded and expandable graphite powders.

Regardless of your product design phase (concept, prototyping, or mass production), we offer technical answers and thermal modeling support to some of your most challenging problems with a fast response time.

Please contact NeoGraf Solutions today at neograf.com/contact.



LEAD. CREATE. CONNECT.

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