

MULTIBASE™ MB25-502 Masterbatch

Best-in-class processing for wire and cable at a competitive price

Wire and cable insulation and jacketing have traditionally been manufactured with chlorinated polymers such as polyvinyl chloride (PVC), known as self-flame retardant. Today, polyethylene (PE) is replacing PVC in many wire and cable applications. However, PE requires heavy loadings of mineral flame retardants such as halogen-free metal hydrates (aluminium hydroxide, magnesium dihydroxide) to meet regulatory requirements. These minerals often make up 60 to 70 percent (by weight) of the PE compound.

High filler loadings have a demonstrated negative effect on processability, including reduced screw torque that slows down throughput and uses more energy, and increased die build-up and pressure that require frequent interruptions for cleaning.

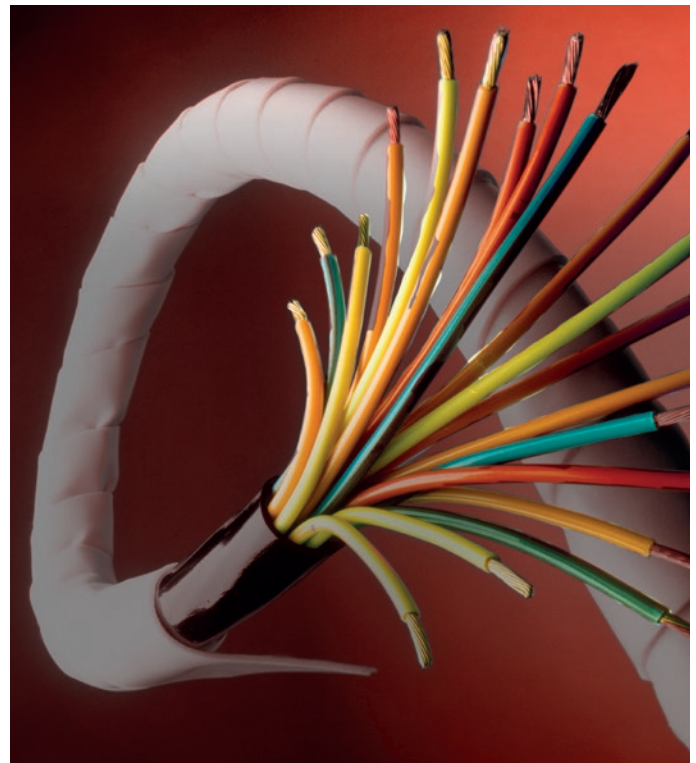
To overcome these issues and optimize throughput, wire and cable insulation and jacketing extruders incorporate processing aids. Until now, they were forced to choose between two alternatives:

1. Expensive, over-engineered additives that delivered unneeded properties; or
2. Lower-cost solutions with average performance

MULTIBASE™ MB25-502 Masterbatch is a new silicone-based technology that combines the best of both options: best-in-class processability at a competitive price. This new product for highly loaded PE compounds (LDPE, LLDPE and XLPE) has been shown to boost throughput significantly compared to compounds containing no processing aids. MULTIBASE™ MB25-502 Masterbatch achieves this higher throughput by decreasing extruder torque and minimizing die build-up and pressure.

Cost-wise, MULTIBASE™ MB25-502 Masterbatch is priced competitively with existing processing aids. For additional savings, the material uses lower loadings than competitive additives.

Advanced new silicone masterbatch technology from DuPont can benefit wire and cable compounders and manufacturers by enhancing productivity through a combination of faster throughput and fewer interruptions.



Features

- Improved processability
- Affordable
- Compatibility with highly loaded PE compounds
- Global availability
- Supplied as easy-handling, free-flowing pellets



Extend Properties, Enhance Processing, Reinforce Materials.

Combining an industry-leading portfolio of silicone-based additives and masterbatches -plus deep experience in serving the industries that use them -we can help you capture greater efficiencies in production while delivering more performance, durability and quality to your end-users.

To learn more about our wide range of plastics, visit www.dupont.com/multibase and contact us if you have any questions.

Benefits

- Delivers best-in-class processability
- Increases throughput by up to 110%
- Reduces extruder screw torque by up to 30%
- Limits die pressure build-up and plate-out
- Saves money with competitive pricing and low loadings (0.5% to 1.0%)

Target Applications

- Mineral-filled PE compounds used in wire and cable insulation and jacketing

Target Customers

- Wire and Cable producers
- HFFR compound producers

NO WARRANTY - PLEASE READ CAREFULLY

© 2021 DuPont. All rights reserved. DuPont™, the DuPont Oval Logo, and all products, unless otherwise noted, denoted with ™, SM or © are trademarks, service marks or registered trademarks of affiliates of DuPont de Nemours, Inc.

The information set forth herein is furnished free of charge and is based on technical data that DuPont believes to be reliable and falls within the normal range of properties. It is intended for use by persons having technical skill, at their own discretion and risk. This data should not be used to establish specification limits nor used alone as the basis of design. Handling precaution information is given with the understanding that those using it will satisfy themselves that their particular conditions of use present no health or safety hazards. Since conditions of product use and disposal are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information. As with any product, evaluation under end use conditions prior to specification is essential. Nothing herein is to be taken as a license to operate or a recommendation to infringe on patents.

