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MULTIBASE[™] MB25-035 Masterbatch

Long-lasting, cost-effective slip performance for form-fill-seal packaging



High-speed, high-volume form-fill-seal (FFS) packaging operations place stresses on low-density polyethylene (LDPE) film, including increased levels of surface friction. Reducing coefficient of friction (COF) is critical to seamless throughput, high productivity and consistent quality. MULTIBASE[™] MB25-035 provides exceptional slip performance while overcoming the drawbacks of organics. Equally important, it helps to control costs.

Traditional organic slip additives, including erucamide and oleamide, rapidly migrate to the film surface and dissipate in a short period of time. Because they migrate so easily, they transfer between film surfaces during rolling and storage, from one film layer to another and from film to package contents, increasing the risk of food contamination. They also lose effectiveness under elevated temperatures, such as exposure to hot foods.

MULTIBASE[™] MB25-035 Masterbatch eliminates these issues by retaining excellent COF reduction values without migration for an extended period (for instance, during long-term storage before use), far surpassing any other technology on the market today.

From a cost-efficiency standpoint, MULTIBASE[™] MB25-035 Masterbatch offers several advantages. First, it is effective at low loadings. Second, it can be incorporated only in the outer layer of multi-layer films (unlike organics, which are added to all layers), so less is needed. Finally, it is based on a standard LDPE grade for packaging film to ensure perfect homogeneity that optimizes performance of the slip additive. With this product, the market finally has a cost-effective way to improve film properties.

In film processing, the masterbatch pellets do not stick together, and therefore feed smoothly into the extruder. The formulation also prevents die build-up and gel formation.





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Features

- Low dynamic COF at low loadings (example: 0.2 COF in film against steel at 3 percent masterbatch loading)
- Provides longer-lasting slip performance during/after thermal aging than organics, which can degrade at elevated temperatures
- Non-migrating across film layers
- Easy dosing
- No die build-up or gel deposition during extrusion

Benefits

- Reduces friction to enable higher throughput and productivity in FFS packaging
- Delivers long-lasting stability to maintain slip performance during delays between film extrusion and FFS operations
- Avoids quality issues by preventing migration of slip additive between film layers or into package contents
- Optimizes processing with smooth dosing and homogeneous dispersion
- Controls costs with lower loadings and use in only the outer layer of multi-layer film

Increase of CoF (in %) during thermal ageing (120h 60°C) LDPE monolayer blown film 40µm



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.

Target Applications

- Low-density polyethylene (LDPE) resins and blends used for blown film in FFS operations
- Linear low-density PE (LLDPE) for FFS and lamination operations

Target Customers

• Film producers for FFS packaging

NO WARRANTY - PLEASE READ CAREFULLY

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