



MULTIBASE™ MB50-315

Silicone Masterbatch

DuPont MULTIBASE™ MB50-315 Masterbatch is a pelletized formulation containing 50% of a functionalized ultra-high molecular weight (UHMW) siloxane polymer dispersed in polycarbonate.

It is designed to be used as an additive in PC compatible systems to impart benefits such as processing improvements and modification of surface characteristics. Liquid siloxane plastic additives have been used for several years to improve the lubricity and flow of thermoplastics. They are effective in this role although some difficulties have been experienced in the incorporation of liquids into thermoplastic melts without the use of specialized equipment. It has also been difficult to produce masterbatches with greater than 20% liquid siloxane because of processing difficulty and bleed problems.

The DuPont MULTIBASE™ MB Series Masterbatches address these problems by supplying a high concentration of an ultra-high molecular weight (UHMW) siloxane as a dispersion in a dry pellet form in a variety of thermoplastics.

Applications

Additive to be used in PC compatible systems

Benefits

When added to PC or similar thermoplastics, at a level of 0.2% to 2%, improved processing and flow of the resin is expected, including better mold filling, less extruder torque, internal lubrication, mold release and faster throughput. At higher addition levels, 2% to 5%, improved surface properties are expected, including lubricity, slip, lower coefficient of friction, and greater mar and abrasion resistance.

The DuPont MULTIBASE™ MB Series Masterbatches are expected to give improved benefits compared to conventional lower molecular weight siloxane additives, e.g., less screw slippage improved release, a lower coefficient of friction, fewer paint and printing problems, and a broader range of performance capabilities.

Product information

Color	White	
Polydimethylsiloxane content	50 %	PhEur 1470

Other properties

Recommended use level	0.2 - 5 %
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Injection

Drying Recommended	yes
Drying Temperature	120 °C
Drying Time, Dehumidified Dryer	4 h
Processing Moisture Content	≤0.02 %



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Storage and stability

Shelf life

48 months

Characteristics

Additives

Release agent

Compatibility

Polycarbonate

Additional information

How to use

DuPont MASTERBATCHES are designed to be processed in the same way as the thermoplastic carrier on which they are based. Masterbatch pellets can be compounded in or added by using a feed hopper during injection molding or extrusion.

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