

Dow Corning[®] MB50-315 Masterbatch

FEATURES & BENEFITS

- Imparts processing improvements and modified surface characteristics
- Improved release property
- Reduced energy consumption
- Enhanced scratch resistance
- Improved slip properties
- Reduce COF
- Enhanced stability vs. traditional processing aids and lubricants

COMPOSITION

- Free flowing solid pellets

Functionalized ultra-high molecular weight siloxane polymer dispersed in polycarbonate (PC)

APPLICATIONS

- Additive to be used in PC compatible systems

TYPICAL PROPERTIES

Specification Writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales office or your Global Dow Corning Connection before writing specifications on this product.

Property	Unit	Result
Appearance		Off-white pellets
Siloxane content	%	50
Carrier resin		PC
Suggested use level	%	0.2 to 5

DESCRIPTION

Dow Corning[®] 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 *Dow Corning*[®] 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.

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 *Dow Corning* 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.

DRYING

For the best result pre drying is recommended. Use a dehumidifying or desiccant dryer set at < -30°C for 4 hours at 120°C (250°F) or until you are able to reach a moisture content of 0.02% or less.

HOW TO USE

Dow Corning 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.

HANDLING

PRECAUTIONS

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE ON THE DOW CORNING WEBSITE AT DOWCORNING.COM, OR FROM YOUR DOW CORNING SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CORNING CUSTOMER SERVICE.

USABLE LIFE AND STORAGE

When stored at or below 35°C (95°F) in the original unopened containers, this product has a usable life of 48 months from the date of production.

PACKAGING INFORMATION

This product is available in a variety of container sizes. Contact your local Dow Corning sales representative for information about container sizes available in your area.

LIMITATIONS

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

HEALTH AND ENVIRONMENTAL INFORMATION

To support customers in their product safety needs, Dow Corning has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available in each area.

For further information, please see our website, dowcorning.com or consult your local Dow Corning representative.

LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that our products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

Dow Corning's sole warranty is that our products will meet the sales specifications in effect at the time of shipment.

Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, DOW CORNING SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY.

DOW CORNING DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

We help you invent the future.™

dowcorning.com