



DOW CORNING® MB50-314 Masterbatch

Ultra-high molecular weight siloxane polymer dispersed in thermoplastic high density polyethylene carrier

FEATURES

- ◆ Imparts processing improvements and modified surface characteristics

BENEFITS

- Improved throughput
- Reduced energy consumption
- Enhanced scratch resistance
- Improved slip properties
- Reduced waste
- Enhanced stability vs traditional processing aids and lubricants

COMPOSITION

- Solid Pellets

APPLICATIONS

- ◆ Additive in HDPE compatible systems.

TYPICAL PROPERTIES

Specifications writers: These values are not intended for use in preparing specifications. Please contact Dow Corning Europe, La Hulpe, Belgium before writing specifications on this product.

Property	Unit	Value
Appearance		Off-white pellets
Siloxane content	%	50
Organic resin		HDPE
Suggested use level	%	2 - 4

DESCRIPTION

DOW CORNING MB50-314 Masterbatch is a pelletised formulation containing 50% of an ultra-high molecular weight siloxane polymer dispersed in HDPE carrier. It is designed to be used as an additive in most HDPE 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 specialised equipment. It has also been difficult to produce masterbatches 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 siloxane as a dispersion in a dry pellet form in a variety of thermoplastics.

BENEFITS

When added to HDPE or similar HDPE at 0.1% to 1.0%, improved processing and flow of the resin is expected, including better mould filling, less extruder torque, internal lubrication, mould release and faster throughput. At higher addition levels, 1% to 5% siloxane, 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, a lower and more consistent dynamic coefficient of friction, and fewer printing problems.

HOW TO USE

DOW CORNING MB Series Masterbatches may be processed in the same way as the thermoplastics on which they are based. Sufficient DOW CORNING MB50-314 Masterbatch should be blended with virgin polymer pellets to give the desired siloxane level in the final product. DOW CORNING MB50-314 Masterbatch pellets can be added at the feed hopper during extrusion.

For further information, please consult your local Dow Corning representative.

HANDLING PRECAUTIONS

A Product Safety Data Sheet should be obtained from your nearest Dow Corning sales office prior to use.

ATTENTION: Before handling, read product information, Product Safety Data Sheets and container labels for safe use, and any physical and/or health hazard information

USABLE LIFE AND STORAGE

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

Dow Corning will guarantee the usable life of this product until the date indicated on the packaging. This date is shown by the letters "EXP" (meaning Expiry) followed by 4 digits, which stand for the month (last day) and year. Example: "EXP 03/99" means use by 31 March 1999.

PACKAGING INFORMATION

This product is available in 50kg

Samples are available in 2kg

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 organisation and a team of Health, Environment and Regularity Affairs specialists available in each area.

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