



## Dow Corning® MB 50-314 Masterbatch

Dow Corning Corporation - Slip Agent / Lubricant / Mold Release / Processing Aid Masterbatch

Sunday, November 3, 2019

### General Information

#### Product Description

Dow Corning® MB50-314 Masterbatch is a pelletized formulation containing 50% of an ultra-high molecular weight siloxane polymer dispersed in HDPE polymer. It is designed to be used as an additive in HDPE-compatible compounds to impart benefits such as processing improvements and modification of surface characteristics.

Silicone-based plastic additives have been used in the plastics industry for several years to improve the mold release and flow of thermoplastics. They are effective in this role, although until now some difficulties have been experienced in the accurate incorporation of low-viscosity liquids into thermoplastic melts without use of specialized equipment.

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.

The siloxane is finely dispersed in the thermoplastic matrix as the discrete or discontinuous phase.

#### APPLICATIONS

- Additive in high density polyethylene compatible systems.

#### General

|                 |                                          |                             |                     |
|-----------------|------------------------------------------|-----------------------------|---------------------|
| Material Status | • Commercial: Active                     |                             |                     |
| Availability    | • Africa & Middle East<br>• Asia Pacific | • Europe<br>• Latin America | • North America     |
| Agency Ratings  | • FDA 21 CFR 177.1520                    | • FDA 21 CFR 177.1520(c)    | • FDA 21 CFR 181.28 |

### ASTM & ISO Properties <sup>1</sup>

| Additives General         | Nominal Value                                                                                 | Unit              |
|---------------------------|-----------------------------------------------------------------------------------------------|-------------------|
| Additives Category        | Masterbatch -- Slip Agent /<br>Lubricant / Mold Release /<br>Processing Aid -- Silicone-based |                   |
| Carrier Resin             | Polyethylene or ethylene-olefin<br>copolymer (PE)                                             |                   |
| Recommended for Use In    | Polyethylene or ethylene-olefin<br>copolymer (PE)                                             |                   |
| Forms                     | Pellets / Granules                                                                            |                   |
| NFPA 704 Safety Rating    |                                                                                               |                   |
| 1                         | Flammability                                                                                  |                   |
| 0                         | •                                                                                             | Health            |
|                           | •                                                                                             | Reactivity        |
| Additives Physical        | Nominal Value                                                                                 | Unit              |
| Density                   | 0.968                                                                                         | g/cm <sup>3</sup> |
| Additive Concentration    | 50                                                                                            | %                 |
| State at Room Temperature | Solid                                                                                         |                   |
| Chemical Description      | Siloxane                                                                                      |                   |

#### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.