



## Dow Corning® MB 50-320 Masterbatch

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

Sunday, November 3, 2019

### General Information

#### Product Description

Dow Corning® MB50-320 Masterbatch is a pelletized formulation containing 50% of a functionalized ultra-high molecular weight siloxane polymer. It is designed to be used as additive in resin compatible systems to improve processing and modify 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 functionalized siloxane has unique advantages over standard polydimethylsiloxane (PDMS). The functional groups provide an attraction of the siloxane molecule to the metal surface during processing. This allows for processing aid advantages as well as surface property modification, i.e., lower coefficient of friction.

#### APPLICATIONS

- An additive typically used in ethylene vinyl acetate compatible systems.

#### General

|                 |                                          |
|-----------------|------------------------------------------|
| Material Status | • Commercial: Active                     |
| Availability    | • Africa & Middle East<br>• Asia Pacific |
|                 | • Europe<br>• Latin America              |
|                 | • North America                          |

### 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          | Vinyl acetate polymer or<br>copolymer (EVA)                                                   |              |
| Recommended for Use In | Vinyl acetate polymer or<br>copolymer (EVA)                                                   |              |
| 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.