# MULTIBASE™ HMB-1103 (PRELIMINARY)

## Silicone Masterbatch

DuPont MULTIBASE™ HMB-1103 Masterbatch is a new-generation tribological modifier and processing aid designed for polar engineered based systems such as PA.

DuPont MULTIBASE™ HMB-1103 Masterbatch delivers slip and wear performance similar to that of standard, highly loaded PTFE compounds. DuPont MULTIBASE™ HMB-1103 Masterbatch is also highly efficient at suppressing stick-slip phenomenon. DuPont HMB-1103 Masterbatch acts as a processing aid and improves flowability.

## Applications

Suggested for highly demanding applications requiring long-term slip performance and wear resistance. Typical examples are bearings, gears and conveyor belts, window lifting systems and steering column sensors, housings and roller shutter systems, kitchen and household appliances, sports equipment as well as car seats adjustment systems.

## Benefits

When used in polar engineered plastics such as PA and POM, DuPont HMB-1103 Masterbatch demonstrates the benefits below when compared to a standard PTFE formulation:

- Similar COF improvement (in-kind and out-of-kind) under high and low loads
- Similar wear resistance (in-kind and out-of-kind) under high and low loads
- Long-term efficiency
- Mechanical performance improvement
- Flowability improvement
- Processability improvement
- Lower density
- Efficient at lower loadings Other benefits
- Easy-to-handle pellets
- Suitable for low- and high-speed applications
- No slip-stick development

## Product information

| | | |
|---|---|---|
| Color | White | |
| Maximum Service Temperature | 300 °C | |

## Thermal properties

| | | |
|---|---|---|
| Melting temperature, 18°F/min | 101 °C | ISO 11357-1/-3 |

## Other properties

| | | |
|---|---|---|
| Density | 950 kg/m³ | ISO 1183 |

# MULTIBASE™ HMB-1103 (PRELIMINARY)

Silicone Masterbatch

## Storage and stability

| | |
|---|---|
| Shelf life | 48 months |

## Characteristics

| | |
|---|---|
| Compatibility | Polyamides, Polyacetals |
| Food contact | FDA 21 CFR |

## Additional information

| | |
|---|---|
| How to use | DuPont HMB-1103 Masterbatch additive levels are suggested between 1.5 and 5 wt%. These low dosages allow you to recover lost mechanical performance (tensile and impact) vs. standard, highly loaded PTFE compounds. It can be used in classical melt blending processes such as twin screw extruders. A physical blend with neat polymer pellets and feed in 0D are suggested. The additive is also suitable for direct dilution on injection press. It is highly recommended to keep melt temperature below 300°C to ensure proper performance. |