DuPont Sell Sheet

Siloxane Additives for POM Compounds

Silicone masterbatches help achieve superior COF performance over PTFE

Our expanding family of siloxane additives greatly enhance the surface properties of polyoxymethylene (POM) compounds used in automotive, consumer, medical and electronics applications.

Available in pellets, MULTIBASE™ MB40-006 and MULTIBASE™ HMB-1103 can significantly improve a compound's coefficient of friction (CoF), allowing it to achieve greater performance at significantly lower levels of polytetrafluoroethylene (PTFE) or silicone-oil, while maintaining excellent mechanical properties.

Additionally, they improve abrasion and mar resistance and offer superior processability vs. competitive materials through torque reduction. These ultra-high molecular weight polymers also overcome the handling and surface adhesion difficulties typical of similar plastic additives.

Key Features

- Better CoF performance over PTFE additives
- Significantly lower dosage needed
- Improves abrasion and mar resistance
- Contributes to torque reduction
- Suitable for in-kind and out-of-kind sliding partners
- Available in pellet form

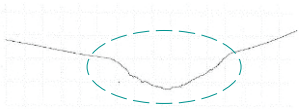
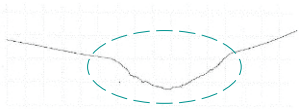
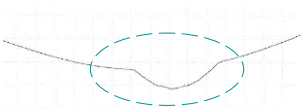
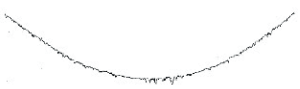
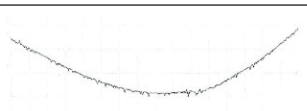
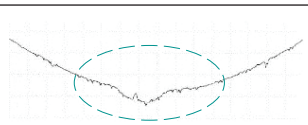
Benefits

- Contributes to visual and aesthetic improvements
- Provides great design freedom due to the improved ability to imprint injected parts • Mechanical properties of POM compounds not impacted
- Improves processability
- Lowers costs and time to market

Target Applications

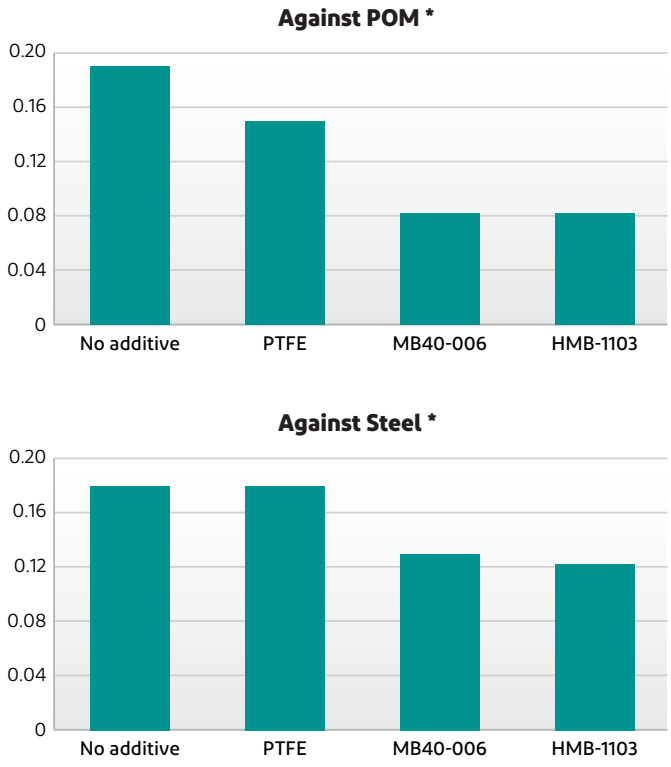
- Manufacturing: bearings, gears and conveyor belts
- Automotive: window lifting systems and steering column sensors
- Medical: small form factors such as insulin pens and dry powder inhalers
- Electronics: housings and roller shutter systems
- Consumer: kitchen and household appliances and sports equipment

Surface Damages (Profilometry*)

	Low Speed	High Speed	High Speed, Long Term
No Additive			
PTFE (20%)			
MULTIBASE™ brand Additives (between 3.5 and 5%)			

* Surface profilometry measured by mean of perthometer S3P

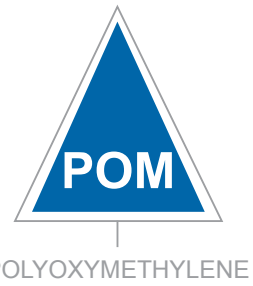
Long-lasting Dynamic COF at high sliding speed, 4000 cycles



* Dynamic COF of POM containing MULTIBASE™ additive against POM or Steel

Extend Properties, Enhance Processing, Reinforce Materials.

Combining an industry-leading portfolio of silicone-based additives and masterbatches -plus deep experience in serving the industries that use them -we can help you capture greater efficiencies in production while delivering more performance, durability and quality to your end-users. To learn more about our wide range of plastics, visit www.dupont.com/multibase and contact us if you have any question.



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