

Dow Corning® MB40-006 Masterbatch

FEATURES & BENEFITS

- Meets FDA requirements 21 CFR Section 177.2470 and 21 CFR Section 181.28
- Compliant with regulation (EC) 1935/2004 and regulation (EC) 2023/2006
- When used in POM compounds, *Dow Corning*® MB40-006 Masterbatch demonstrates below benefits when compared to standard 20 wt% PTFE formulation:
 - 20% COF improvement (against POM and steel)
 - Stable long term COF reduction against several material such as POM or Steel
 - Mechanical performances improvement
 - Efficiency at low loading
 - Visual and aesthetic contribution
 - Abrasion and mar resistance improvement
 - Injectability improvement
 - Processability improvement
- Easy to handle pellets
- Suitable for low and high speed applications
- Suitable for POM-C and POM-H
- No stick-slip development on high speed applications

COMPOSITION

- Polydimethylsiloxane – polyacetal compound

Tribology modifier for POM / Plastics additive

APPLICATIONS

- Designed for applications requiring long term COF reduction. Typical examples are bearings, gears and conveyor belts, window lifting systems and steering column sensors, housings and roller shutter systems, kitchen and household appliances and sports equipment.

TYPICAL PROPERTIES

Specification Writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales office or your Global Dow Corning Connection before writing specifications on this product.

Test*	Property	Unit	Result
	Physical form	NA	Pellets
ISO 1109	Specific Gravity	Kg/l	1.23

*ISO: International Standardization Organization.

DESCRIPTION

Dow Corning MB40-006 Masterbatch is a tribological modifier for polyacetal based systems. This additive is an easy to handle pellet.

Dow Corning MB40-006 Masterbatch enables you to achieve lower coefficient of friction compared to standard PTFE. Typical additivation levels between 2 and 5 wt% show highly efficient coefficient of friction reduction by at least 20% vs corresponding 15–20 wt% PTFE formulations against POM and stainless steel. *Dow Corning* MB40-006 Masterbatch allows you to recover lost mechanical performances (tensile and impact) vs standard PTFE and reach initial performances of neat polyacetal.

Dow Corning MB40-006 Masterbatch is also highly efficient at suppressing stick-slip phenomenon at low speed when used in applications against steel following VDA 230-206 norm.

Dow Corning MB40-006 Masterbatch is suitable for long term applications.

HOW TO USE

Addition levels between 2 and 5 wt% are suggested for *Dow Corning* MB40-006 Masterbatch.

It can be used in classical melt blending processes like Twin screw extruders. A physical blend with neat POM pellets and feed in 0D is recommended. It can also be used in direct dilution on injection press.

HANDLING PRECAUTIONS

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE ON

THE DOW CORNING WEBSITE AT DOWCORNING.COM, OR FROM YOUR DOW CORNING SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CORNING CUSTOMER SERVICE.

USABLE LIFE AND STORAGE

When stored in unopened original container at a max temperature of 35°C, *Dow Corning* MB40-006 Masterbatch additive has a usable lifetime of 48 months.

PACKAGING INFORMATION

Dow Corning MB40-006 Masterbatch is available in 25 kg bags, 400 kg boxes and 5 kg boxes for sampling.

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 organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available in each area.

For further information, please see our website, dowcorning.com or consult your local Dow Corning representative.

LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that our products are safe,

effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

Dow Corning's sole warranty is that our products will meet the sales specifications in effect at the time of shipment.

Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

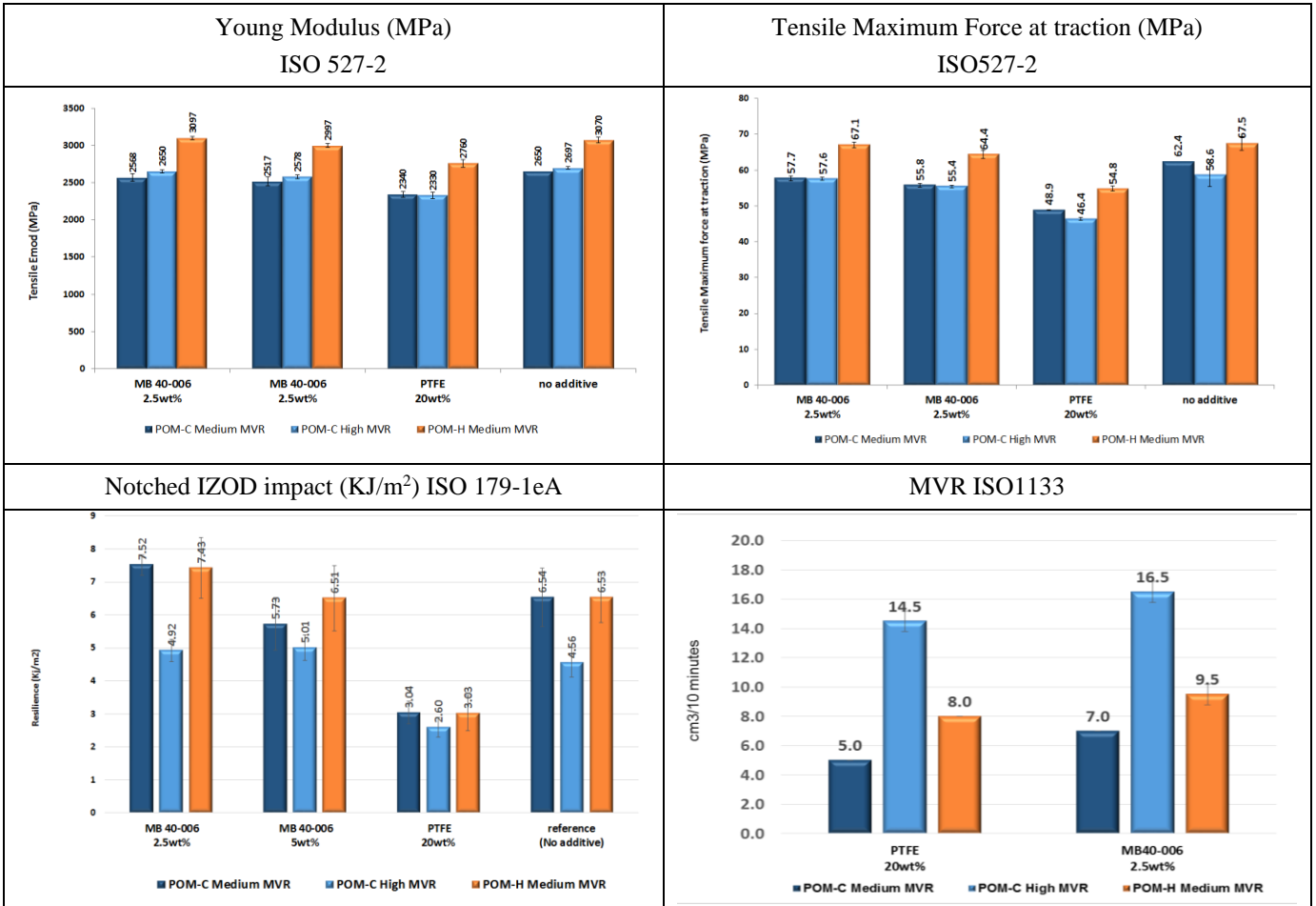
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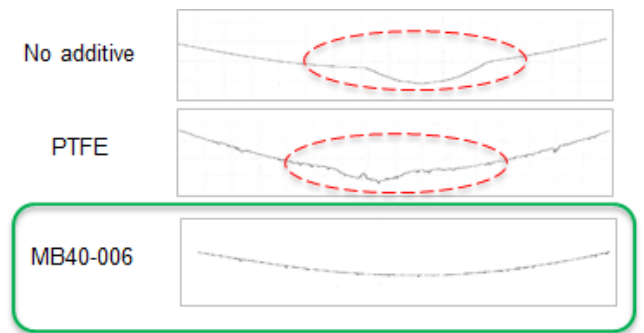
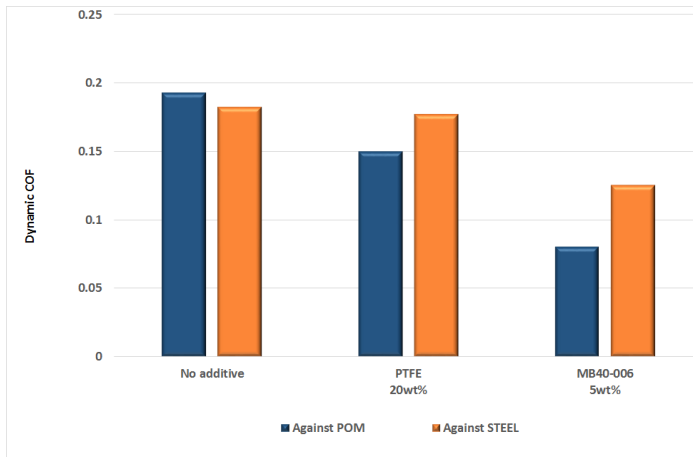
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Dow Corning MB40-006 Masterbatch tensile performances in different POM grades:

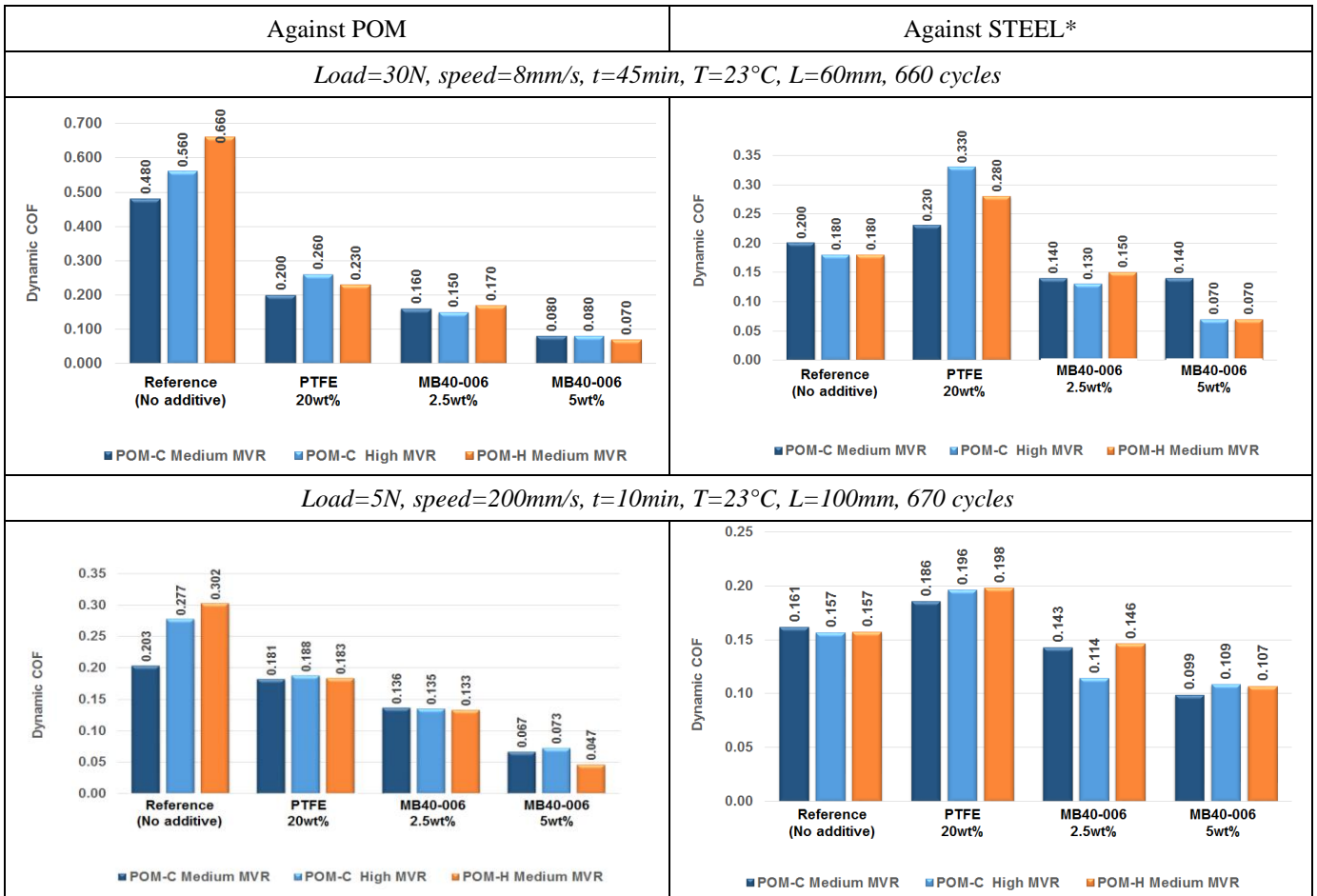


Dow Corning MB40-006 Masterbatch long term dynamic coefficient of friction measurements under different conditions:



Dow Corning MB40-006 Masterbatch reaches lower levels of COF compared to a 20 wt% PTFE formulation.

Dow Corning MB40-006 Masterbatch dynamic coefficient of friction measurements under different conditions:



*Rockwell C hardness 62

Dow Corning MB40-006 Masterbatch demonstrates superior coefficient of friction improvements by at least 20% compared to a typical PTFE 20 wt% standard formulation. Dow Corning MB40-006 Masterbatch offers a real alternative to classical PTFE additive.

Dow Corning MB40-006 Masterbatch performances summary:

