

# MULTIBASE™ SiMB Processing Aid Solutions



## Industry Needs

The PE extrusion market is highly diversified by application and technical requirements. There is a need for faster throughput and lower energy consumption

MULTIBASE™ thermoplastic additives are silicone masterbatches in pellet form that allow optimized rheological conditions to enable a smooth extrusion process.

MULTIBASE™ processing aids not only eliminate melt fracture but also stabilize rheology for consistent, high-quality product. They are especially efficient for highly filled PE compounds that require better filler dispersion and flowability.

## Features

Enables PFAS-free solutions  
Immediate efficiency at low loadings

## Benefits

### For the process:

- Productivity gains: increased throughput
- Reduce torque at given throughput
- Reduce die pressure
- Reduce energy consumption
- Enable higher filler loading
- Reduce shear
- Prevent gel formation
- Prevent die build-up

### For the extruded part:

- Eliminate melt fracture
- Prevent gel formation
- Reduce die build up
- Immediate efficiency at low levels

## Target Applications

- PE - profile extrusion
- PE - non-printed flexible film
- PE / PP pipes & cable extrusion

Most suitable for polyolefins. Particularly effective on high-filler content applications.

Application	MULTIBASE™ product	Recommended addition level
PE - profile extrusion	MB25-235	1 - 3%
PE - pipes extrusion	MB50-002	0.5 - 1.5%
PE - non-printed flexible film	MB25-235	1 - 3%

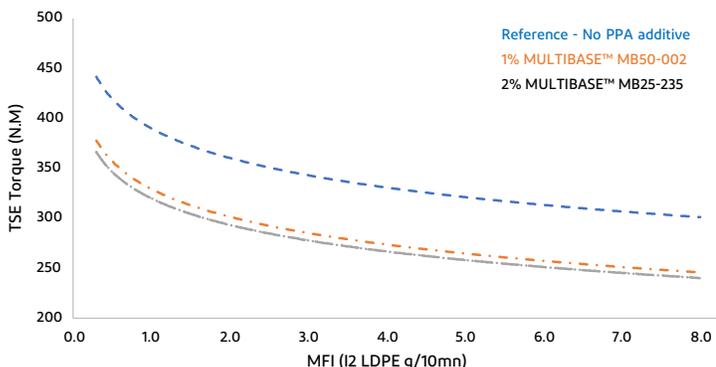
[Click here](#) to access TDS for  
Multibase™ MB25-235

# Rheological Behavior of Compounds Containing MULTIBASE™ SiMB Masterbatch

## Balance Throughput and Efficiency

MULTIBASE™ allows you to increase throughput without sacrificing efficiency. MULTIBASE™ SiMB provides immediate efficiency at low loading levels.

MULTIBASE™ significantly decreases die pressure, optimizing flow and reducing energy consumption.



Source: DuPont

Test were performed on twin screw extruder for a broad range of unfilled LDPE resins.

## Eliminate Melt Fracture, Elevate Quality

Melt fracture is a barrier to achieving the high-quality output your operation demands. MULTIBASE™ processing aids not only eliminate melt fracture but also stabilize rheology, ensuring a consistent, high-quality product.

Melt fracture elimination tests show that adding 3% MULTIBASE™ MB25-235 effectively eliminates melt fracture:

Reference – without MULTIBASE™



With 3% MULTIBASE™ MB25-235



Melt fracture is usually encountered during PE extrusion at high throughput rates, leading to poor surface appearance.

MULTIBASE™ SiMB acts to lubricate metal parts in the extruder and die, providing a smooth path for the polymer to flow and, therefore, eliminating melt fracture marks.

[dupont.com/multibase](https://dupont.com/multibase)



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