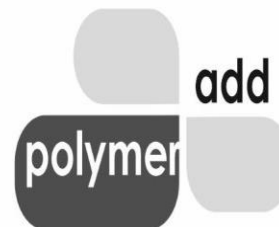


Polymer Add (Thailand) Co.,Ltd.

Office - 106, Chalarempakiat, Lor 9, Soi 22, Yak 5, Nongbon, Prawet, Bangkok, Thailand 10250

Factory - 188/3, Moo 8, Tambon Bangpu Mai, Amphoe Muang Samut Prakan, Samutprakan, Thailand 10280

Mobile - Thai : 0804531391, English: 0839415475, E-mail – contact@polymeradd.co.th



TECHNICAL DATA SHEET

WHITEMB MICROBLEND W45

Micronized Additive Blend for White Masterbatch Applications

Product Description

WhiteMB MicroBlend W45 is a specialized micronized additive powder developed to enhance pigment dispersion, melt flow, and process stability in **TiO₂ -based white masterbatches**. This pre-engineered blend improves carrier–TiO₂ compatibility and overall dispersion quality, especially in high-load formulations using PE, PP, EVA, and PS resins.

Key Features and Benefits

- Improves TiO₂ dispersion, brightness, and opacity
- Reduces melt viscosity, screw torque, and cycle time
- Minimizes plate-out and improves extruder stability
- Enhances long-term storage stability and flow
- Suitable for high-speed compounding and film-grade MBs

Typical Composition

Component	Function	% w/w	CAS Number
Micronized PE Wax	Dispersant, melt flow enhancer	40%	9002-88-4
Micronized Zinc Stearate	Pigment wetting, process lubricant	20%	557-05-1
Glycerol Monostearate (GMS 90%)	Anti-static, internal lubricant	10%	31566-31-1
Dispersible Fumed Silica	Flow aid, anti-settling	8%	112945-52-5
Synthetic Amorphous Silica	Clump prevention, flow stabilizer	7%	112926-00-8
Micronized Polyethylene Oxide (High MW)	Melt viscosity controller	5%	25322-68-3
Silicone-Treated Silica	Surface slip, anti-blocking	5%	Proprietary
Micronized Antioxidant AO-1010	Processing stabilizer	5%	6683-19-8
TOTAL		100%	

Typical Physical Properties

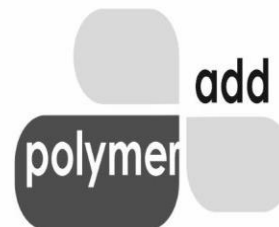
Property	Value
Appearance	White micronized powder
Bulk Density	0.28 – 0.38 g/cm ³
Particle Size (D100)	< 20 µm
Particle Size (D50)	6 – 9 µm
Melting Point Range	95 – 135 °C (blend basis)
Dispersibility	Excellent in PE, PP, EVA resin systems
Odor	Neutral to faint waxy

Polymer Add (Thailand) Co.,Ltd.

Office - 106, Chalarempriakiat, Lor 9, Soi 22, Yak 5, Nongbon, Prawet, Bangkok, Thailand 10250

Factory - 188/3, Moo 8, Tambon Bangpu Mai, Amphoe Muang Samut Prakan, Samutprakan, Thailand 10280

Mobile - Thai : 0804531391, English: 0839415475, E-mail – contact@polymeradd.co.th



Recommended Applications

- White masterbatches (up to 70% TiO_2) in PE, PP, EVA
- Film, injection, and blow molding masterbatches
- High-speed twin-screw extrusion lines
- UV-resistant or food-grade white MBs (upon request)

Recommended Dosage

- 1.0 – 4.0% of total masterbatch formulation
- Can be dry blended with TiO_2 and polymer carrier or pre-dispersed into resin melt

Packaging and Storage

Item	Details
Packaging	10–20 kg kraft bag with PE liner or 25 kg HDPE drum
Shelf Life	12 months in sealed packaging under dry storage
Storage Conditions	Store in cool, dry conditions; avoid high humidity and direct sunlight
Palletization	Stretch-wrapped with corner guards; max 500 kg per pallet

Regulatory Compliance

- Ingredients compliant with standard industrial specifications for masterbatch use
- Additional grades available for FDA/food-contact and REACH-compliant applications
- AO-1010 provides additive-level stabilization for TiO_2 -rich formulations

This preblend is offered as a dry additive system designed for technical use in polymer processing. The user is responsible for determining the appropriate dosage, processing parameters, and compatibility with their specific polymer and equipment. Polymer Add Thailand shall not be liable for any consequential or incidental damages arising from incorrect use or unverified end-application performance

Document Ref: WHITEMB MICROBLEND W45 TDS_v1.0 | Issued: **July 2025** | Supersedes all previous versions