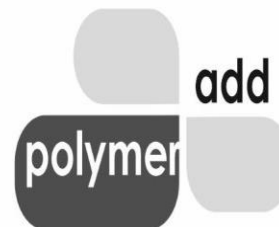


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TECHNICAL DATA SHEET

BLACKMB MICROBLEND B45

Micronized Additive Blend for Black Masterbatch Applications

Product Description

BlackMB MicroBlend B45 is a micronized multifunctional additive blend tailored for high-performance **carbon black masterbatches**. It improves dispersion of fine carbon black particles, enhances melt flow during processing, and reduces agglomeration and die build-up. The blend is compatible with PE, PP, EVA, and PS carriers and is optimized for high-load and high-shear applications.

Key Features and Benefits

- Improves carbon black dispersion, prevents re-agglomeration
- Enhances extruder throughput and reduces melt pressure
- Lowers screw torque and stabilizes melt rheology
- Increases surface uniformity and minimizes plate-out
- Supports clean processing and long-term stability

Typical Composition

Component	Function	% w/w	CAS Number
Micronized Polyethylene Wax	Dispersant, melt flow enhancer	42%	9002-88-4
Zinc Stearate (Micronized)	Pigment wetting agent, lubricant	18%	557-05-1
Fumed Silica (Hydrophobic, R972-type)	Flow control, anti-agglomeration	10%	112945-52-5
Glycerol Monostearate (GMS 90%)	Internal slip, flow enhancer	10%	31566-31-1
Synthetic Amorphous Silica (Precipitated)	Anti-caking, stabilizer	8%	112926-00-8
Polyethylene Oxide (High MW)	Melt viscosity modifier	4%	25322-68-3
AO-1010	Processing stabilizer	5%	6683-19-8
AO-168	Secondary antioxidant (synergist)	3%	31570-04-4
TOTAL		100%	

Typical Physical Properties

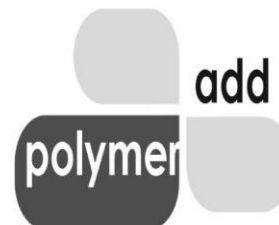
Property	Value
Appearance	Off-white to light grey micronized powder
Bulk Density	0.32 – 0.44 g/cm ³
Particle Size (D100)	< 20 µm
Particle Size (D50)	5 – 8 µm
Melting Point Range	100 – 135 °C (blend basis)
Dispersibility	Excellent in PE/PP/EVA/PS resins
Odor	Neutral to faint waxy

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Recommended Applications

- Black masterbatches with high carbon black loadings
- PE and PP carrier systems (film, molding, extrusion)
- High-speed twin-screw extrusion and pelletizing
- Conductive or non-conductive black masterbatches

Recommended Dosage

- 1.0 – 4.0% of total masterbatch formulation weight
- Can be dry blended with pigment and carrier resin or added during melt mixing

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, well-ventilated area; avoid moisture exposure
Palletization	Max 500 kg per pallet; stretch-wrapped with corner guards and top sheet

Regulatory Compliance

- All ingredients listed with CAS numbers; no proprietary substances used
- AO-1010 and AO-168 ensure antioxidant protection during high-shear extrusion
- Meets industrial requirements for polymer additive masterbatches
- Non-food contact grade; food-contact variants available upon request

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

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