Polymer Add (Thailand) Co.,Ltd.
Office - 106, Chalaremprakiat, 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

MICRONISED POLYPROPYLENE WAX

FUNCTIONAL SURFACE & PROCESSING ADDITIVE

1) Identification & Chemical Information

Item	Details
Material Type	Polypropylene wax
Chemical Description	Low molecular weight polypropylene
Typical Molecular Weight Range	~1,000–10,000 g/mol
Common Industry / Trade Synonyms	PP wax; Polypropylene wax micropowder

2) Physical and Chemical Properties

Property	Description
Appearance	White to off-white fine powder
Density	~0.90–0.92 g/cm^3
Melting Range	~140–165 °C
Solubility	Insoluble in water; compatible with non-polar systems
Hardness	Higher than polyethylene waxes
Particle Size Distribution (Micronised Grade)	D50: ~5–20 µm D90: <40 µm D99: <60 µm

3) Application-Specific Technical Discussion

3.1 Specific Benefits

Micronised polypropylene wax is selected where surface lubrication, scratch resistance, and controlled dispersion are required across polymers, coatings, inks, and adhesive systems.

- Reduced surface friction and improved slip behaviour
- Improved dispersion of pigments and fillers
- Enhanced surface hardness and mar resistance
- Stable processing and flow modification

3.2 End Uses

- Slip and lubrication additive in plastics and polymer compounds
- Dispersing aid for pigments and fillers in masterbatches
- Processing aid and surface modifier in inks and coatings

- Scratch, abrasion, and mar-resistance additive in paints and varnishes
- Flow, release, and anti-block additive in hot-melt adhesives and powder coatings

3.3 Key Physical, Chemical & Performance Parameters

- Low molecular weight polypropylene structure
- Relatively high melting range compared to PE waxes
- High surface hardness
- Chemical inertness
- Fine, controlled particle size distribution

3.4 Known Limitations

- Limited compatibility with highly polar systems
- Excessive dosage may affect gloss or transparency
- Performance dependent on dispersion quality and formulation balance

4) Regulatory Note

Regulatory status depends on grade, purity, and intended use. Food-contact and regional compliance listings, where applicable, are addressed in separate regulatory documentation.

5) Disclaimer

Information provided for technical reference only.
No warranty of fitness for a particular purpose.
User responsible for validation, trials, and regulatory compliance.

6) Creation and Review

Creation: January 2026
Next Technical Review: January 2028

END OF ARTICLE