FINE ORGANICS

FinaSperse®

Specialty Wetting & Dispersing Additives for Colour masterbatches & compounds

Attaining high quality dispersion in masterbatches is a widespread challenge faced by the Masterbatch producers & Compounding Experts. Therefore, there is a continuous demand for more effective dispersing agents than the conventional ones (non-oxidized PE waxes & metal stearates) in order to achieve desired superior coloristic properties & processing benefits.

FinaSperse is a range of new generation wetting & dispersing additives designed to help in improving dispersion of organic & inorganic pigments in colour masterbatches & compounds. Pigments typically exhibit a tendency to form agglomerates due to prominent **'pigment-pigment'** interactions, which then reflects in an inadequate dispersion in the base polymer. Unique functionalities of FinaSperse additives enable 'wetting' of hard pigment agglomerates through **'Effective Molecular Interactions (EMI)'** resulting in preferred **'pigment-FinaSperse additive'** interactions. It helps in minimizing an extent of pigment particles agglomeration, which post melt-blending process brings about remarkable pigment dispersion quality improvement.

FinaSperse additives can suitably replace the conventional dispersing additives either entirely or partially to offer techno-commercial benefits to the Masterbatch producers & Compounding Experts.

FinaSperse DT 500 N	FinaSperse DT 700
• **Loading: up to 5%***	• **Loading: from 5 up to 15%***
• **Food contact compliance & REACH registered**	• **Food contact compliance**
• **Higher colour strength**	• **Low FPV requirement (For Fiber application)**

*Additive use level (%) on the basis of current non-oxidized PE-wax & metal stearate loading & further highly recommended to be optimized suitably

FINE Polymer Additives

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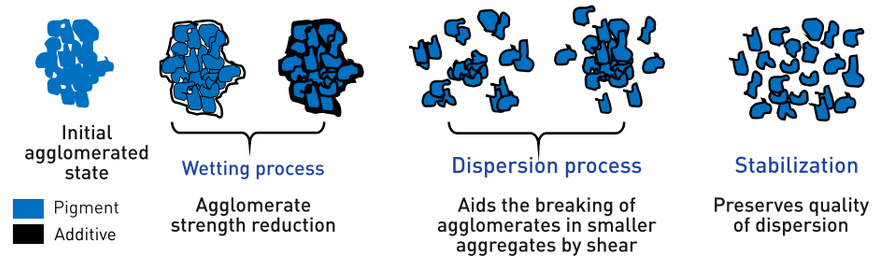
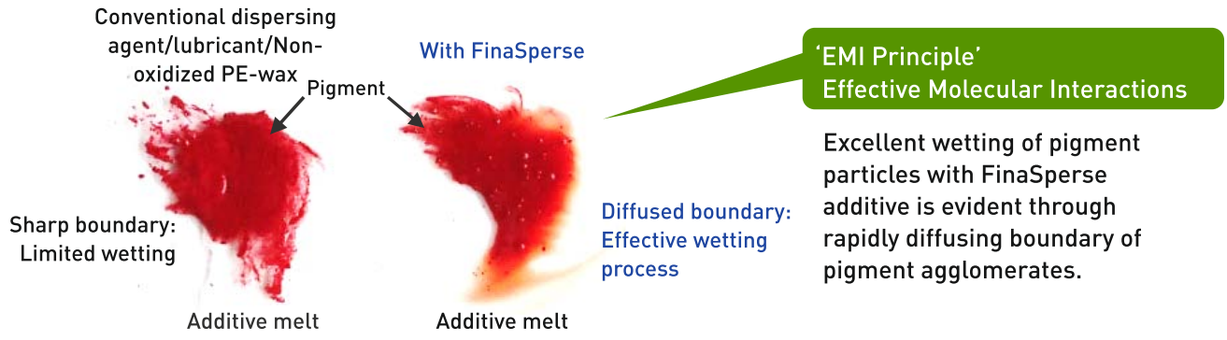
Working principle of FinaSperse

- Basis Non-covalent molecular interactions
- Effective 'wetting' is achieved due to the dispersive electromagnetic interactions (EMI) and the pigment dispersion quality is enhanced by weakening the pigment agglomerate strength

Visual evidence of effective wetting

Schematic: Dispersion process involves wetting, dispersion and distribution of pigment particles

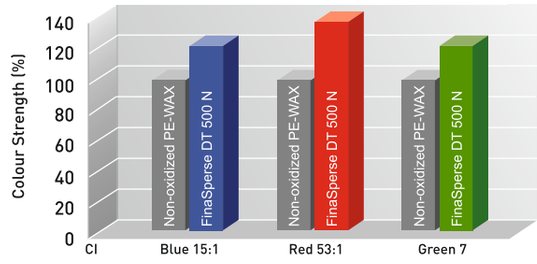




Excellent product performance

FinaSperse DT 500 N

Right half: with FinaSpere DT 500 N
Left half: with conventional additive



- Higher colour strength: Through superior dispersion quality
- Potential savings: Desired colour strength can be attained with lower loading of pigment
- Quality improvement: Minimum/no specks on films, improved surface texture

FinaSperse DT 700

Properties	PP Wax	FinaSperse DT 700
Yellow Pigment	44%	44%
Loading of additive	10%	10%
FPV, bar/g	3.2	**0.04**
Color strength	100	104.6

Properties	PP Wax	FinaSperse DT 700
Red oxide pigment	25%	25%
Loading of additive	12.5%	12.5%
FPV, bar/g	10.1	**5.4**
Color strength	100	110.5

- Effective wetting and dispersion due to suitable chemical features
- Lower FPV value suitable for critical application such as fiber MBs
- Quality improvement: Minimum/no specks on films, improved surface texture

FinaSperse additives can offer excellent technical benefits translating into quality improvements & savings.

For Further technical assistance, Please contact our Technical Services Department | Email : info@fineorganics.com