

# FILLER MASTERBATCH

Supreme Filler Masterbatches consists of a series of innovative formulations designed to add value to a wide range of applications in Polystyrene (PS), Polyethylene (PE) & Polypropylene (PP) including Raffia / FIBC tapes, Mono & Multilayer films, Non woven fabrics, Extrusion Coating, Lamination, Injection molding & Blow molding and Pipes.

## Salient Features

- ❖ Range of grades available in PS, PE & PP
- ❖ Produced with 100% virgin polymer
- ❖ Produced with lowest hardness CaCO<sub>3</sub>, Low median & topcut with narrow particle distribution
- ❖ Additive package for ease of processing & surface aesthetics
- ❖ Good flow properties ensuring excellent dispersion & ease of dilution
- ❖ Excellent filterability
- ❖ Low moisture content
- ❖ Available with / without Optical brighteners
- ❖ Compliant with food contact application
- ❖ Heavy metal free, RoHS compliant
- ❖ Custom formulations depending upon order quantity

## Types of Filler Masterbatches

**MAXLOAD** : PE based high performance filler MBs for Mono & Multilayer blown films

- ❖ Addition levels of 5 – 70%, depending upon film thickness & application
- ❖ Higher thermal conductivity of Calcium carbonate increases production throughputs
- ❖ Opaque white colour with BLUE undertone, thus reduces dosage of high cost White MB
- ❖ Low moisture content, thus preheating or addition of Dessicant powder is optional / minimal
- ❖ Above mentioned benefits results into lower formulation & power costs, thus saving in conversion cost
- ❖ Better bubble stability at higher line throughputs



- ❖ Enhanced Antiblocking properties
- ❖ Improved slip resistance, facilitating winding
- ❖ Improved printability & film barrier properties
- ❖ Improved folding, creasing & sealing properties

**MODIFIER :** High performance MBs for various applications in PE & PP including Raffia / FIBC tapes, Mono & Multilayer films, Non woven fabrics, Extrusion Coating, Lamination, Injection molding & Blow molding and Pipes

- ❖ Addition levels of 3 – 25%, depending upon application, reduces formulation cost
- ❖ Helps in increasing dosage of Filler MB, without compromising on mechanical properties
- ❖ Improves dispersion of CaCO<sub>3</sub> in the base polymer
- ❖ Reduces powder formation from the surface of tape, film or fabric
- ❖ Allows part substitution of virgin polymer with recycle / reprocessed polymer
- ❖ Reduces extruder barrel temperature by upto 10 Deg C, reducing polymer degradation
- ❖ Higher production throughputs
- ❖ Improves surface aesthetics – smoothness, shine & gloss
- ❖ Improved slip resistance, facilitating winding
- ❖ Improved printability & film barrier properties
- ❖ Improved folding, creasing & sealing properties
- ❖ Reduces wear & tear of machine parts

**POLYOLEFINS  
NEW BEST FRIEND**

**TAPEFIL :** PP / HDPE based CaCO<sub>3</sub> (Milky / Opaque) MBs for Raffia & FIBC

- ❖ Excellent Processability & Dispersion of masterbatch upto 50%
- ❖ Excellent performance upto 600 m/min line speed
- ❖ Used for PP / HDPE tapes of 350 denier & above
- ❖ Low water carryover
- ❖ Minimal tape breakage
- ❖ Low powder generation in tape & weaving plant
- ❖ High white index
- ❖ High tenacity & elongation
- ❖ Improves dimensional stability – low tape shrinkage / warpage
- ❖ Improves bag stackability



**FABFIL** : PP based  $\text{CaCO}_3$  (Milky / Opaque) MBs for PP Non Woven, Extrusion Coating, Paper sandwich lamination & Tarpaulin

- ❖ Excellent Processability & Dispersion, loading between 10 - 30%
- ❖ Suitable for PP fibres for non woven fabric & film for lamination
- ❖ Higher fabric strength due to increased Tensile strength & Elongation
- ❖ Improved control over Fabric GSM
- ❖ ZERO dropping
- ❖ Provides defect free fabric & better hold on stitching
- ❖ Forms uniform & permanent bonding, solves problem of delamination patches
- ❖ Excellent bonding with other substrates like polymer, paper



**FILMFIL** : PE based  $\text{CaCO}_3$  (Milky / Opaque) MBs for LLDPE / LDPE & HDPE Mono & Multilayer film

- ❖ Excellent Processability & Dispersion of masterbatch upto 50%
- ❖ Suitable for addition in Monolayer film & in middle layer of multilayer film
- ❖ Minimal impact on film dart impact
- ❖ Better bubble stability at higher line throughputs
- ❖ Enhanced Antiblocking properties
- ❖ Improved slip resistance, facilitating winding
- ❖ Improved printability & film barrier properties
- ❖ Improved folding, creasing & sealing properties



**MOLDFIL** : PE based  $\text{CaCO}_3$  (Milky / Opaque) MBs for Injection & Blow Molding

- ❖ Excellent Processability & Dispersion of masterbatch upto 30%
- ❖ Faster cooling time, thus lower cycle time & higher productivity
- ❖ Minimal effect on top load and drop impact properties
- ❖ Improved neck finish & reduced weld lines
- ❖ Improves ESCR
- ❖ High white index & opacity
- ❖ Good surface aesthetics



**TRANSFIL** : Transparent filler MBs based on PS / PE / PP for foam, tape, film, corrugated boards, straps

- ❖ Excellent Processability & Dispersion of masterbatch upto 35%
- ❖ High clarity filler
- ❖ Minimum loss of clarity at 10-15% level
- ❖ Suitable for coloured applications
- ❖ High performance nucleating agent
- ❖ Uniform cell size & distribution in foam
- ❖ Improves surface finish



**STYROFIL** : PS based CaCO<sub>3</sub> (Milky/Opaque) Masterbatches for injection molding and Extrusion thermoforming

- ❖ Excellent Processability & Dispersion of masterbatch upto 10%
- ❖ Faster cooling time, thus lower cycle time & higher productivity
- ❖ High white index & opacity
- ❖ Good surface aesthetics
- ❖ Lowers product cost



### Regulatory Compliance

All ingredients used in the Masterbatch are suitable for food contact applications.

All grades are Heavy Metal free and are compliant with RoHS regulation.

### Packaging & Storage

Material is supplied in pellet form, packed in 25 Kg laminated bags. SPL recommends storage of material in a ventilated & covered facility, protected from Moisture, Sunlight and Heat. The packing material used is not UV stabilized and hence should not be exposed to sunlight.



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