

# 06-24 Info letter **CAPROWAX P Masterbatches and Colouring**

Ladies and gentlemen,

December 2024

gladly I would like to inform you of **CAPROWAX P™**- Colour Masterbatches.

## Universal colour application of biopolymer/biocomposites with CAPROWAX P Masterbatches:

The palette of **CAPROWAX P™** colour masterbatches together with the compostable, waterproof carrier material **CAPROWAX P™ 6006-C65** (Intermediate) enable a moderate, eco-friendly, mineral colouration and brightening without addition of Titanium Dioxide. The biomineral, natural Calcite, is used as a white pigment with gentle covering brightening and soil improving properties. **CAPROWAX P™**- carrier material consist of aliphatic – biodegradable MARINE, home / industrial compostable - certified polyester and modified, readily biodegradable, renewable, GMO-free plant oil.

## **Masterbatches are suited for universal colouration of Bioplastics / Blends / Biocomposites / Filaments:**

**PLA, PBS, PHA, PCL, CAPROWAX P™/ Blends / BioMineralComposites, Polysaccharide/ Derivates, PVAc/Bioplastic-Blends, PVOH, Bio-NFC/WPC, Bio-UPR, Bio-TPE and NIPU.**

Low-dusty incorporated in a compostable carrier material pigments are: calcined pigmentlike Kaolin (white pigment for moderate brightening)

- natural, biomineral Calcite (dull white pigment, acid binding)
- biobased vegetable Carbon (black pigment), CO2 long-term fixation in form of activated carbon
- Lava rock fluor is able to remove atmospheric CO2 by weathering
- Muskovit mica for matt perlescent without addition of TiO2
- harmless inorganic pigments of synthetic, aniline free production
- chromatic / achromatic and pearlescent pigments

## **Masterbatches for soil improvement QX:**

**QX = biobased carbon black, Lava rock fluor from volcanic eifel, are soil improver with water retention capacity and fertility**

**BM = BioMineral, natural Calcite, acid-binding and soil similar**

**FK = calcined Kaolin, compost friendly**

## **CO2 long-term fixation by vegetable carbon/lava rock flour**

for translucent, covering, achromatic and pearlescent colouration.

They are lightfast, non-migratory, temperature stable, insoluble in water, comparable with natural, mineral pigments and already mineralised. Masterbatch pellets are added to different bioplastics in a range of 0,5-4%. Processing range at 90-200°C, short time up 220°C. In coloured final products content of each separate coloured pigment is ≤1%. In the course of composting the brown to black colour of compost or humus change over to the coloured bioplastic and the colourful appearance disappears. Colourations with natural, bio-mineral Calcite-Masterbatches support biogenic weathering in soil and waters.

Coloured bioplastics comply the specifications of DIN EN 13432.

## **CAPROWAX P™ BioMineral Mineral Composites direct compounds**

Coloured, thermoplastic, easily demouldable. waterproof direct compounds for biodegradable applications: Extrusion/injection--/deep--drawing/pressing and moulded parts, stamping, roller printing, decor, 3D printing, hot melt adhesives, seals, films, natural fiber coating, surfaces/foils for intake of fats and oils. The direct compounds consist of compostable binder with Calcite and/or Kaolin, calcined. Colourants made from biobased vegetable carbon, ultramarine, non-magnetic iron oxides, manganese violet, mica and kaolin without addition of TiO2. For your visual assessment of laboratory samples you will receive up to 4 coloured examples - selected by you - in the form of buttons and model films.

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**Ideas increase to pellets**

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