

# 01-24 Info letter CAPROWAX P Colour Masterbatches

Ladies and gentlemen,

Februar 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 biominerals, 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, biominerals Calcite (dull white pigment, acid binding)
- biobased vegetable Carbon (black pigment), CO<sub>2</sub> long-term fixation in form of activated carbon
- Lava rock flour is able to remove atmospheric CO<sub>2</sub> by weathering
- Muskovit mica for matt perlescent without addition of TiO<sub>2</sub>
- harmless inorganic pigments of synthetic, aniline free production
- chromatic / achromatic and pearlescent pigments

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

**QX = biobased carbon black, Lava rock flour 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**

## **CO<sub>2</sub> 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™ BioMineralComposite coloured direct compounds**

Coloured, thermoplastic, waterproof materials for biodegradable applications: Extrusion/injection--/deep-drawing/pressing and moulded parts, stamping, roller printing, 3D printing, hot melt adhesives, seals, films, natural fiber coating, cups, growing and soap dishes, vases, cans, signs. The direct compounds consist of compostable binder with calcite. Colourants made from bio-based vegetable carbon, ultramarine, non-magnetic iron oxides, manganese violet, mica and kaolin without addition of TiO<sub>2</sub>.

Albrecht Dinkelaker

Polymer- and Product Development  
Talstraße 83  
D 60437 Frankfurt am Main

Ideas increase to pellets

Fon: 0049 69 76893910 / E-Mail: info(at)polyfea2.de / Web: www.caprowax-p.eu