

02-23 Info letter **CAPROWAX P** Colour **Masterbatches**

Ladies and gentlemen,

May 2023

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™** Masterbatches is changed now to the eco-friendly, calcined, soil similar, pigmentlike Kaolin (FK) as a white pigment. The new Masterbatch CAPROWAX P White FK 005 and the compostable, waterproof carrier material **CAPROWAX P™ 6006-C65** (Intermediate) enable a moderate, eco-friendly, mineral colouration/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)
- 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

Lava rock flour is able to remove CO₂ by weathering

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 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 Calcium Carbonate-Masterbatches support biogenic weathering in soil and waters. Coloured bioplastics comply the specifications of DIN EN 13432.

Kind regards

A. Dinkelaker

Albrecht Dinkelaker

Polymer- and Product Development

Talstrasse 83

D 60437 Frankfurt am Main

Ideas increase to pellets