

CAPROWAX P™ 6006-C65-NF4140 NF-BioComposite

Application:

Nature Fibres-Bio-Composites, Sinter- and Carrier Material

Customer Information:

Laboratory prototype

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for customer projects

Polymer and Product Development

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Product Information

Blumenweg 2

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D 79669 Zell im Wiesental

Physical Properties

Physical form		Powder <800 µm
Apparent density	g/l	ca. 350
Tamped density	g/l	ca. 486
Content of nature fibres	%	40
Particle nature fibres	µm	<250 (98%)
Residual humidity	%	<5
Softening Temperature	DSC °C (°F)	57-63 (135-145)

*) Based on the biological sources of waxes different values of viscosity could be occur

Tensile strength and elongation are dependent of temperature and stretching conditions

Measurements make only sense with comparable process conditions and thickness of moulded or stretched articles

Description
NF-Bio-Composite
Bio-Dry-Blend-Powder

CAPROWAX P™ 6006-C65-NF4140 is a mixture between powdered, basic components of CAPROWAX P 6006-C65 (intermediate) 40 % part of readily processable, resin free wood fibres.

≈ 84% of organic carbon are biobased

All components comply the specification of DIN EN 13432

Advantages of binder
CAPROWAX P 6006-C65

consists of aliphatic, home/industrial compostable, certified polyester and modified, readily biodegradable, renewable, GMO-free plant oil. manufactured in form of powdered intermediate, comparable with CAPROWAX P® 6006 DIN EN 13432 tested by MFPA Weimar

Certificate No.: P31/029-05

No food and feeding stuff
Ecofriendly composition

GM-free, no content of starch or PLA
natural, rosinfree wood fibres
natural, related to wood colouration

Applications

Bio-Dry-Blend-Powder for NF-BioComposites, sintered core-material, Bio-NFC and Bio-WPC, trays, plates, decor, sandwiches pellets, fixed bed material for growth, consumable bioreactors
Fibre Composite material, thermoplastic NatureFibre-Bio-Prepregs
In pelletized form: Injection moulding or other thermoforming
Suited for compostable one way products

NF-BioComposites
Sintering or extrusion

Processable under gentle condition without extrusion
Mixing, scattering, drying at 70-80°C (158-166°F)
Compacting/Deaeration at 80°C (176°F)
Sintering at 90-160°C (194-320°F)
Grouting at 100-120°C / Cooling down under pressure
Bio-NFC and Bio-WPC thermoforming at 80-160 °C.
Other thermoforming methods at 100-160°C as injection moulding or extrusion after thermoplastic agglomeration of powder to pellets

Storage/Instruction

Avoid heat/moisture, storage in original containers only
Do not heat melt above 90°C (194°F) over long time

CAPROWAX P™ NF compostable of course