

CAPROWAX P™ 6006-C65-NF4110 NF-BioComposite

Application: Nature Fibers-Bio-Composites, Sinter- and Carrier Material

Page 1 of 3

Customer Information:

Laboratory prototype

Albrecht Dinkelaker

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for Customer projects

Polymer and Product Development

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Product Information

Talstrasse 83

www.caprowax-p.eu

07/2023

D 60437 Frankfurt am Main

Physical Properties

Physical form		Powder <800 µm
Content of nature fibers	%	10
Particle nature fibers	µm	<250
Residual humidity	%	<5
Softening Temperature	DSC °C	57-63

*) 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 of spreadable, thermoplastic NF-Composite-Bio-Dry-Blend-Powder

CAPROWAX P™ 6006-C65-NF4110 is a dry-blend-mixture of compostable binding agent CAPROWAX P 6006-C65 (intermediate) And 10% 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 - biodegradable MARINE, 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 coloured fibres

Applications

Bio-Dry-Blend-Powder for NF-BioComposites, sintered core material Bio-WPC, cups, trays, plates, decor, sandwiches, Pellets for fixed bed, consumable bioreactors Fiber Composite material, thermoplastic NatureFiber-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 Compacting/Deaeration at 80°C Sintering at 90-160°C 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 over long time

CAPROWAX P™ NF compostable of course

CAPROWAX P™ 6006-C65-NF4120 NF-BioComposite

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

Page 2 of 3

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Product Information
07/2023

Albrecht Dinkelaker
Polymer and Product Development
Talstrasse 83
D 60437 Frankfurt am Main

Physical Properties

Physical form		Powder <800 µm
Content of nature fibers	%	20
Particle nature fibers	µm	<250
Residual humidity	%	<5
Softening Temperature	DSC °C	57-63

*) 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 of spreadable,
thermoplastic NF-Composite-
Bio-Dry-Blend-Powder

CAPROWAX P™ 6006-C65-NF4120 is a dry-blend-mixture of compostable binding agent CAPROWAX P 6006-C65 (intermediate) And 20 % resin free wood fibres.

≈ 85% of organic carbon are biobased

All components comply the specification of DIN EN 13432

Advantages of binder
CAPROWAX P 6006-C65

consists of aliphatic - biodegradable MARINE, home/industrial compostable - certified polyester and modified, readily biodegradable, renewable, GMO-free plant oil.

Manufactured in form of powdered intermediate, comparable with

Certificate No.: P31/029-05

CAPROWAX P® 6006 DIN EN 13432 tested by MFPA Weimar

No food and feeding stuff
Ecofriendly composition

GM-free, no content of starch or PLA
natural, rosinfree, wood coloured fibres

Applications

Bio-Dry-Blend-Powder for NF-BioComposites, sintered core material

Bio-WPC, cups, trays, plates, decor, sandwiches,

Pellets for fixed bed, consumable bioreactors

Fiber Composite material, thermoplastic NatureFiber-Bio-Prepregs

In pelletized form: Injection moulding or other thermoforming

Suited for compostable one way products

NF-BioComposites
Sintering, extrusion, futher
thermoplastic processing

Processable under gentle condition without extrusion

Mixing, scattering, drying at 70-80°C

Compacting/Deaeration at 80°C

Sintering at 90-140°C

Grouting at 100-120°C / Cooling down under pressure

Bio-WPC thermoforming at 80-140 °C.

Other thermoforming methods at 100-140°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 over long time

CAPROWAX P™ NF compostable of course

CAPROWAX P™ 6006-C65-NF4140 NF-BioComposite

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

Page 3 of 3

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Product Information
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Physical Properties

Physical form		Powder <800 µm
Content of nature fibers	%	40
Particle nature fibers	µm	<250
Residual humidity	%	<5
Softening Temperature	DSC °C	57-63

*) 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 of spreadable,
thermoplastic NF-Composite-
Bio-Dry-Blend-Powder

CAPROWAX P™ 6006-C65-NF4140 is a dry-blend-mixture of compostable binding agent CAPROWAX P 6006-C65 (intermediate) And 40 % resin free wood fibres.

≈ 87% of organic carbon are biobased

All components comply the specification of DIN EN 13432

Advantages of binder
CAPROWAX P 6006-C65

consists of aliphatic - biodegradable MARINE, home/industrial compostable - certified polyester and modified, readily biodegradable, renewable, GMO-free plant oil.

Manufactured in form of powdered intermediate, comparable with

Certificate No.: P31/029-05

CAPROWAX P® 6006 DIN EN 13432 tested by MFPA Weimar

No food and feeding stuff
Ecofriendly composition

GM-free, no content of starch or PLA

natural, rosinfree wood fibres, wood-like colour design

Applications

Woodlike sawable NF-BioComposites, sintered core material

Bio-WPC, cups, trays, plates, decor, sandwiches,

Pellets for fixed bed, consumable bioreactors

Fiber Composite material, thermoplastic NatureFiber-Bio-Prepregs

In pelletized form: Injection moulding or other thermoforming

Suited for compostable one way products

NF-BioComposites
Sintering, extrusion, futher
thermoplastic processing

Processable under gentle condition without extrusion at 100-140°C

Mixing, scattering, drying at 70-80°C

Compacting/Deaeration at 80°C

Sintering at 90-140°C

Grouting at 100-120°C / Cooling down under pressure

Bio-WPC thermoforming at 90-140 °C.

Compounding of powder to pellets 130-140°C

Other thermoforming methods as injection moulding at 120-140°C

Doughlike, less sticky, kneadable at 100-140°C

Storage/Instruction

Avoid heat/moisture, storage in original containers only

Do not heat melt above 90°C over long time

CAPROWAX P™ NF compostable of course

