

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

Fon +49 (0)69 76 89 39 10

info@polyfea2.de

www.caprowax-p.eu

for Customer projects

Product Information

06/2021

Polymer and Product Development

Talstrasse 83

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 (°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 of spreadable, thermoplastic NF-Composite-Bio-Dry-Blend-Powder

CAPROWAX P™ 6006-C65-NF4010 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 compostable Certificate No.: P31/029-05

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

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, 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 (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

CAPROWAX P™ 6006-C65-NF4120 NF-BioComposite

Application:

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

Page 2 of 3

Customer Information:
Fon +49 (0)69 76 89 39 10
info@polyfea2.de
www.caprowax-p.eu

Laboratory prototype
for Customer projects
Product Information
06/2021

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 (°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 of spreadable,
thermoplastic NF-Composite-
Bio-Dry-Blend-Powder

CAPROWAX P™ 6006-C65-NF4020 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
compostable

Certificate No.: P31/029-05

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

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, 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 (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

CAPROWAX P™ 6006-C65-NF4140 NF-BioComposite

Application:

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

Page 3 of 3

Customer Information:
Fon +49 (0)69 76 89 39 10
info@polyfea2.de
www.caprowax-p.eu

Laboratory prototype
for Customer projects
Product Information
06/2021

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

Physical Properties

Physical form		Powder <800 µm
Content of nature fibers	%	40
Particle nature fibers	µm	<250
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 of spreadable,
thermoplastic NF-Composite-
Bio-Dry-Blend-Powder

CAPROWAX P™ 6006-C65-NF4040 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, 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
natural, related to wood colouration

Applications

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