

# CAPROWAX P™ 6006-C65-NF5910 NF-BioComposite

Application:

Nature-Fibre-Bio-Composites, Dry-Blend-Powder-Coating

Sinter- and Carrier material

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[www.caprowax-p.eu](http://www.caprowax-p.eu)

for Customer projects

Product Information

07/2023

Polymer and Product Development

Talstrasse 83

D 60437 Frankfurt am Main

## Physical Properties

Physical form		Powder, extra fine-grained <500 µm (98%)
Cellulose content	%	10
Cellulose particles d50	µm	248
Residual humidity	%	<4
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 free flowing, good dosage, thermoplastic NF-Bio-Composite-Dry-Blend-Powder

CAPROWAX P™ 6006-C65-NF5910 is an extra fine-grained dry-blend-mixture of compostable binding agent CAPROWAX P 6006-C65 (intermediate) and 10 % microcrystalline cellulose

84 % of organic carbon are biobased (calculated)

All components comply the specification of DIN EN 13432

Advantages of binding agent 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

Without content of aromatic or nitrogeneous substances

Free colour design with white fibres

Applications

NF-BioComposites, Sinter- and Carrier material, Textile coating, Suited for compostable one way products

Bio-NFC, cups, trays, plates, decor, sandwiches, textiles

Pellets for fixed bed, consumable bioreactors, sintered core material, thermoplastic NatureFibre-Bio-Prepregs

In pelletized form: Injection moulding or other thermoforming

NF-BioComposites with Sintering, extrusion, further thermoplastic processing

Order of process management for Bio-NFC :

Powder scattering / dosing / coating

Drying at 70-80°C by bottom heat, IR or Microwave

Deaeration/Compacting at 80°C / pressureless sintering at 100-160°C

Cooling down / Grouting at 100-130°C / Cooling down <40°C

Mold cooling at 15°C / Demolding or strain <40°C

Calendering to Bio-NFC-Sheets at 100-70°C

Bio-NFC thermoforming at 80-100°C.

Compounding or agglomeration of powder to pellets from 130 to 160°C

Injection moulding or extrusion at 130-160°C

Dry air drying at max. 50°C

Storage/Instruction

Avoid heat and 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-NF5920 NF-BioComposite

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for Customer projects

Product Information

07/2023

Polymer and Product Development

Talstrasse 83

D 60437 Frankfurt am Main

## Physical Properties

Physical form			Powder, extra fine-grained <500 µm (98%)
Cellulose content	%		20
Cellulose particles d50	µm		248
Bulk density	g/l		428
Residual humidity	%		<4
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 free flowing,  
good dosage, thermoplastic  
NF-Bio-Composite-  
Dry-Blend-Powder

CAPROWAX P™ 6006-C65-NF5920 is an extra fine-grained dry-  
blend-mixture of compostable binding agent CAPROWAX P 6006-C65  
(intermediate) and 20 % microcrystalline cellulose  
**84,6 % of organic carbon are biobased (calculated)**  
All components comply the specification of DIN EN 13432

Advantages of binding agent  
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  
Without content of aromatic or nitrogenous substances  
Free colour design with white fibres

Applications

BioComposites, Sinter- and Carrier material, Textile coating,  
Suited for compostable one way products  
Bio-NFC, cups, trays, plates, decor, sandwiches, textiles  
Pellets for fixed bed, consumable bioreactors, sintered core material,  
thermoplastic NatureFibre-Bio-Prepregs  
In pelletized form: Injection moulding or other thermoforming

NF-BioComposites with  
Sintering, extrusion, further  
thermoplastic processing

Order of process management for Bio-NFC and Bio-WPC:  
Powder scattering / dosing / coating  
Drying at 70-80°C by bottom heat, IR or Microwave  
Deaeration/Compacting at 80°C / pressureless sintering at 100-160°C  
Cooling down / Grouting at 100-130°C / Cooling down <40°C  
Mold cooling at 15°C / Demolding or strain <40°C  
Calendering to Bio-NFC-Sheets at 100-80°C  
Bio-NFC and Bio-WPC thermoforming at 80-100°C.  
Compounding or agglomeration of powder to pellets from 130 to 160°C  
Injection moulding or extrusion at 130-160°C  
Dry air drying at max. 50°C

Storage/Instruction

Avoid heat and 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-NF5940 NF-BioComposite

Application:

Nature-Fibre-Bio-Composites, Dry-Blend-Powder-Coating  
Sinter- and Carrier material

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**for Customer projects**  
Product Information  
07/2023

Polymer and Product Development  
Talstrasse 83  
D 60437 Frankfurt am Main

## Physical Properties

Physical form			Powder, extra fine-grained <500 µm (98%)
Cellulose content	%		40
Cellulose particles d50	µm		248
Residual humidity	%		<4
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 free flowing,  
good dosage, thermoplastic  
NF-Bio-Composite-  
Dry-Blend-Powder

CAPROWAX P™ 6006-C65-NF5940 is an extra fine-grained dry-  
blend-mixture of compostable binding agent CAPROWAX P 6006-C65  
(intermediate) and 40 % microcrystalline cellulose  
**86 % of organic carbon are biobased (calculated)**  
All components comply the specification of DIN EN 13432

Advantages of binding agent  
CAPROWAX P 6006-C65

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

Certificate No.: P31/029-05

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  
Without content of aromatic or nitrogeneous substances  
Free colour design with white fibres

Applications

BioComposites, Sinter- and Carrier material, Textile coating,  
Suited for compostable one way products  
Bio-NFC, cups, trays, plates, decor, sandwiches, textiles  
Pellets for fixed bed, consumable bioreactors, sintered core material,  
thermoplastic NatureFibre-Bio-Prepregs  
In pelletized form: Injection moulding or other thermoforming

NF-BioComposites with  
Sintering, extrusion, further  
thermoplastic processing

Order of process management for Bio-NFC and Bio-WPC:  
Powder scattering / dosing / coating  
Drying at 70-80°C by bottom heat, IR or Microwave  
Deaeration/Compacting at 80°C / pressureless sintering at 100-160°C  
Cooling down / Grouting at 100-130°C / Cooling down <40°C  
Mold cooling at 15°C / Demolding or strain <40°C  
Calendering to Bio-NFC-Sheets at 100-80°C  
Bio-NFC thermoforming at 80-100°C.  
Compounding or agglomeration of powder to pellets from 130 to 160°C  
Injection moulding or extrusion at 130-160°C  
Dry air drying at max. 50°C

Storage/Instruction

Avoid heat and moisture, storage in original containers only  
Do not heat melt above 90°C over long time

**CAPROWAX P™ NF compostable of course**