



# LITE-SOIL

All in ONE: Air-Soil-Water

## Tender documents

### Lite-Net, Lite-Strips, Irrigation and construction site protection for trees

#### 1. Lite-Net (growing nets, distribution nets, roll goods):

##### 1.1 Growing nets for new tree plantations in 2 sizes\* and 3 materials:

###### **Growth net Bio1 M:**

Ready-made transport net for large-area underground water and air supply of root balls, cut from 100 % biodegradable cellulose needle fleece on wood basis (approx. 600 g/m<sup>2</sup>, thickness approx. 6 mm, pore proportion/water storage ≥ 85 %, decomposition time approx. 1-2 years). Rootable fleece net with mesh size Ø ≥ 9 cm for wrapping  
Root ball Ø = approx. 35-60 cm, size approx. 0.8 m<sup>2</sup>.

###### **Growth net Bio1 L:**

Ready-made transport net for large-area underground water and air supply of root balls, cut from 100 % biodegradable cellulose needle fleece on wood basis (approx. 600 g/m<sup>2</sup>, thickness approx. 6 mm, pore proportion/water storage ≥ 85 %, decomposition time approx. 1-2 years). Rootable fleece net with mesh size Ø ≥ 10 cm for wrapping  
Root ball Ø = approx. 55-85 cm, size approx. 1.2 m<sup>2</sup>.

###### **Growth net Bio5 M:**

Ready-made transport net for large-area underground water and air supply of root balls, cut from 100% biodegradable/compostable PLA needle fleece (approx. 70% PLA + 30% cellulose, approx. 500 g/m<sup>2</sup>, thickness approx. 6 mm, pore ratio/water storage ≥ 85%, degradation time approx. 5-10 years). Rootable fleece net with mesh size Ø ≥ 9 cm for wrapping  
Root ball Ø = approx. 35-60 cm, size approx. 0.8 m<sup>2</sup>.

###### **Growth net Bio5 L:**

Ready-made transport net for large-area underground water and air supply of root balls, cut from 100% biodegradable/compostable PLA needle fleece (approx. 70% PLA + 30% cellulose, approx. 500 g/m<sup>2</sup>, thickness approx. 6 mm, pore ratio/water storage ≥ 85%, degradation time approx. 5-10 years). Rootable fleece net with mesh size Ø ≥ 10 cm for wrapping root ball Ø = approx. 55-85 cm, size approx. 1.2 m<sup>2</sup>.

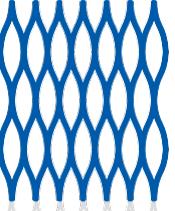
###### **Growing net PP L:**

Ready-made transport net for large-area underground water and air supply of root balls, cut from durable PP needle fleece (approx. 600 g/m<sup>2</sup>, UV stabilised, thickness approx. 6 mm, pore proportion/water storage ≥ 85%, pore opening width < 80 µm (EN ISO 12956), maximum tensile strength ≥ 40 kN/m (EN ISO 10319)). Rootable nonwoven net with mesh size Ø ≥ 10 cm for wrapping root ball Ø = approx. 55-85 cm, size approx. 1.2 m<sup>2</sup>.

\*further sizes on request



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## 1.2 Distribution networks for new tree plantations in 2 materials\*:

### Distribution net Bio1:

Ready-made transport net for underground storage and distribution of water and air, cut from 100 % biodegradable cellulose needle fleece on a wood base (approx. 600 g/m<sup>2</sup>, thickness approx. 6 mm, pore proportion/water storage ≥ 85 %, decomposition time approx. 1-2 years). Rootable fleece net with mesh size Ø ≥ 13 cm for horizontal installation under the root ball.

Size approx. 2.1 m<sup>2</sup> (approx. 1.3 x 1.6 m).

### Distribution net Bio5:

Ready-made transport net for underground storage and distribution of water and air, cut from 100% biodegradable/compostable PLA needle fleece (approx. 70% PLA + 30% cellulose, approx. 500 g/m<sup>2</sup>, thickness approx. 6 mm, pore content / water storage ≥ 85%, decomposition time approx. 5-10 years). Rootable fleece net with mesh size Ø ≥ 13 cm for horizontal installation under the root ball.

Size approx. 2.1 m<sup>2</sup> (approx. 1.3 x 1.6 m).

### Distribution net PP:

Ready-made transport net for underground storage and distribution of water and air, cut from durable PP needle fleece (approx. 600 g/m<sup>2</sup>, UV stabilised, thickness approx. 6 mm, pore proportion/water storage ≥ 85%, pore opening width < 80 µm (EN ISO 12956), maximum tensile strength ≥ 40 kN/m (EN ISO 10319)). Rootable fleece net with mesh size Ø ≥ 13 cm for horizontal installation under the root ball.

Size approx. 2.1 m<sup>2</sup> (approx. 1.3 x 1.6 m).

\*further sizes on request

## 1.3 Lite-Net roll goods for the underground air and water supply of trees in 3 sizes and 3 materials each for individual confectioning as growth, distribution and tree pit net:

### Lite-Net roll Bio1 130 C20/6:

Water storage and distribution net as underground installed growth aid, cut from 100 % biodegradable cellulose needle fleece on wood basis (approx. 600 g/m<sup>2</sup>, thickness approx. 6 mm, pore proportion/water storage ≥ 85 %, decomposition time approx. 1-2 years). Rootable transport net with mesh size Ø ≥ 13 cm, can be pulled apart to at least 4 times its width, max. net area of approx. 21 m<sup>2</sup> with approx. 1.3 x 16.3 m.

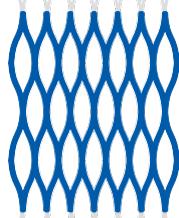
Form of delivery: roll with width approx. 0.3 m, length approx. 20 m, diameter approx. 0.35 m, weight approx. 3.6 kg.

### Lite-Net roll Bio1 350 C20/6:

Water storage and distribution net as underground installed growth aid, cut from 100 % biodegradable cellulose needle fleece on wood basis (approx. 600 g/m<sup>2</sup>, thickness approx. 6 mm, pore proportion/water storage ≥ 85 %, decomposition time approx. 1-2 years). Rootable transport net with mesh size Ø ≥ 13 cm, can be pulled apart to at least 4 times its width, max. net area of approx. 57 m<sup>2</sup> with approx. 3.5 x 16.3 m.

Form of delivery: roll with width approx. 0.8 m, length approx. 20 m, diameter approx. 0.35 m, weight approx. 10 kg.





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## Lite-Net roll Bio1 520 C20/6:

Water storage and distribution net as underground installed growth aid, cut from 100 % biodegradable cellulose needle fleece on wood basis (approx. 600 g/m<sup>2</sup>, thickness approx. 6 mm, pore proportion/water storage ≥ 85 %, decomposition time approx. 1-2 years). Rootable transport net with mesh size Ø ≥ 13 cm, extendable to at least 4 times the width, max. net surface of approx. 85 m<sup>2</sup> at approx. 5.2 x 16.3 m.

Form of delivery: roll with width approx. 1.2 m, length approx. 20 m, diameter approx. 0.35 m, weight approx. 15 kg.

## Lite-Net roll Bio5 130 C20/6:

Water storage and distribution network as long-term, underground installed growth aid, cut from 100 % biodegradable/compostable PLA needle fleece (approx. 70 % PLA + 30 % cellulose, approx. 500 g/m<sup>2</sup>, thickness approx. 6 mm, pore content / water storage ≥ 85 %, degradation time approx. 5-10 years). Rootable transport net with mesh size Ø ≥ 13 cm, extendable to at least 4 times the width, max. net area of approx. 21 m<sup>2</sup> at approx. 1.3 x 16.3 m.

Form of delivery: roll with width approx. 0.3 m, length approx. 20 m, diameter approx. 0.35 m, weight approx. 3.0 kg.

## Lite-Net roll Bio5 350 C20/6:

Water storage and distribution network as long-term, underground installed growth aid, cut from 100 % biodegradable/compostable PLA needle fleece (approx. 70 % PLA + 30 % cellulose, approx. 500 g/m<sup>2</sup>, thickness approx. 6 mm, pore content / water storage ≥ 85 %, degradation time approx. 5-10 years). Rootable transport net with mesh size Ø ≥ 13 cm, extendable to at least 4 times the width, max. net area of approx. 57 m<sup>2</sup> at approx. 3.5 x 16.3 m.

Form of delivery: roll with width approx. 0.8 m, length approx. 20 m, diameter approx. 0.35 m, weight approx. 8 kg.

## Lite-Net roll Bio5 520 C20/6:

Water storage and distribution network as long-term, underground installed growth aid, cut from 100 % biodegradable/compostable PLA needle fleece (approx. 70 % PLA + 30 % cellulose, approx. 500 g/m<sup>2</sup>, thickness approx. 6 mm, pore content / water storage ≥ 85 %, degradation time approx. 5-10 years). Rootable transport net with mesh size Ø ≥ 13 cm, extendable to at least 4 times the width, max. net area of approx. 85 m<sup>2</sup> at approx. 5.2 x 16.3 m.

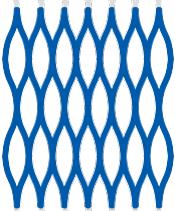
Form of delivery: roll with width approx. 1.2 m, length approx. 20 m, diameter approx. 0.35 m, weight approx. 12 kg.

## Lite-Net roll PP 130 C20/6:

Permanent, underground water storage and distribution network, cut from PP needle fleece (approx. 600 g/m<sup>2</sup>, UV stabilised, thickness approx. 6 mm, pore content / water storage ≥ 85%, pore opening width < 80 µm (EN ISO 12956), maximum tensile strength ≥ 40 kN/m (EN ISO 10319)). Rootable transport net with mesh size Ø ≥ 13 cm, extendable to at least 4 times the width, maximum net area of approx. 21 m<sup>2</sup> at approx. 1.3 x 16.3 m.

Form of delivery: roll with width approx. 0.3 m, length approx. 20 m, diameter approx. 0.35 m, weight approx. 3.6 kg.





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## Lite-Net roll PP 350 C20/6:

Permanent, underground water storage and distribution network, cut from PP needle fleece (approx. 600 g/m<sup>2</sup>, UV stabilised, thickness approx. 6 mm, pore content / water storage ≥ 85%, pore opening width < 80 µm (EN ISO 12956), maximum tensile strength ≥ 40 kN/m (EN ISO 10319)).

Rootable transport net with mesh size Ø ≥ 13 cm, extendable to at least 4 times the width, maximum net area of approx. 57 m<sup>2</sup> at approx. 3.5 x 16.3 m.

Form of delivery: roll with width approx. 0.8 m, length approx. 20 m, diameter approx. 0.35 m, weight approx. 10 kg.

## Lite-Net roll PP 520 C20/6:

Durable, underground water storage and distribution network, cut from PP needle fleece (approx. 600 g/m<sup>2</sup>, UV stabilized, thickness approx. 6 mm, pore ratio/water storage ≥ 85%, pore opening width < 80 µm (EN ISO 12956), maximum tensile strength ≥ 40 kN/m (EN ISO 10319)). Rootable transport net with mesh size Ø ≥ 13 cm, extendable to at least 4 times the width, maximum net area of approx. 85 m<sup>2</sup> at approx. 5.2 x 16.3 m.

Form of delivery: roll with width approx. 1.2 m, length approx. 20 m, diameter approx. 0.35 m, weight approx. 15 kg.

## 2. Lite-Strips as substrate improvement and root-near water reservoir in 3 material variants:

### Lite-Strips Bio1:

Water storage fleece in strip form (approx. 70/12/6 mm) for mixing into the soil for watering new tree plantations close to the roots and for improving the substrate permeability as well as against compaction, cut from 100 % biodegradable cellulose needle fleece on wood basis (approx. 600 g/m<sup>2</sup>, thickness approx. 6 mm, pore proportion/water storage ≥ 85 %, decomposition time approx. 1-2 years). Approx. 10-20 l per tree pit.

Delivery form: 50l, 250l or 1000l

### Lite-Strips Bio5:

Water storage fleece in strip form (approx. 70/12/6 mm) for mixing into the soil for irrigation of new tree plantings close to the roots and for improving substrate permeability and against compaction, cut from 100% biodegradable/compostable PLA needle fleece (approx. 70% PLA + 30% cellulose, approx. 500 g/m<sup>2</sup>, thickness approx. 6 mm, pore content / water storage ≥ 85%, degradation time approx. 5-10 years). Approx. 10-20 l per tree pit.

Delivery form: 50l, 250l or 1000l





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## **Lite-Strips PP:**

Water storage fleece in strip form (approx. 70/12/6 mm) to be mixed into the soil for irrigation of new tree plantations close to the roots and to improve substrate permeability as well as against compaction, cut from durable PP needle fleece (approx. 600 g/m<sup>2</sup>, UV stabilized, thickness approx. 6 mm, pore proportion/water storage ≥ 85%, pore opening width < 80 µm (EN ISO 12956), maximum tensile strength ≥ 40 kN/m (EN ISO 10319)). Approx. 10-20 l per tree pit. Delivery form: 50l, 250l or 1000l

## **3. Active irrigation:**

### **3.1 BlueLite-Ring ready made up for new tree planting:**

#### **BlueLite-Ring:**

Geotextile-coated irrigation pipe (3 outlet openings per m, approx. 2l water per opening /h, pipe diameter 16 mm) with water distribution function made of durable PP needle fleece (approx. 380 g/m<sup>2</sup>, UV stabilised, thickness approx. 3.5 mm, pore opening width < 90 µm (EN ISO 12956)), maximum tensile strength ≥ 25 kN/m (EN ISO 10319), width approx. 6 cm, for covered laying around a tree trunk.

Ring diameter approx. 50 cm.

### **3.2 BlueLite-Tube as well as BlueLite-Cover rolls for individual assembly for new tree planting:**

#### **BlueLite-Tube:**

Geotextile-coated irrigation pipe (3 outlet openings per m, approx. 2l water per opening /h, pipe diameter 16 mm) with water distribution function made of durable PP needle fleece (approx. 380 g/m<sup>2</sup>, UV stabilised, thickness approx. 3.5 mm, pore opening width < 90 µm (EN ISO 12956)), maximum tensile strength ≥ 25 kN/m (EN ISO 10319), width approx. 6 cm, for covered laying around or along trees.

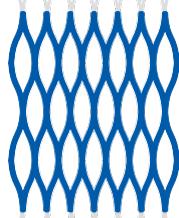
Roll length 50 or 100 m.

#### **BlueLite-Cover:**

Protective and distribution cover made of durable PP needle fleece (approx. 380 g/m<sup>2</sup>, UV stabilised, thickness approx. 3.5 mm, pore opening width < 90 µm (EN ISO 12956)), maximum tensile strength ≥ 25 kN/m (EN ISO 10319), width approx. 6 cm, for individual insertion of irrigation pipes and subsequent covered laying around or along trees.

Roll length 25 m.





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## 4. Root protection fleece for construction sites (Lite-Rootprotect):

### 4.1 Root curtain in fleece form as biodegradable construction site protection with water storage function in 2 widths and 2 thicknesses:

Root curtain M (80 cm width), 330 g/m<sup>2</sup>:

100 % biodegradable water storage and protective fleece for root curtain (pore content > 85 %, fibre thickness < 2 dtex, weight > 330 g/m<sup>2</sup>, thickness min. 3.5 mm, maximum tensile strength lengthways/crossways > 190 N/5 (DIN EN 29073-3)). 100 % needle-punched cellulose fleece without chemical additives.

Fleece can be simply covered over at the end of the construction site and supports approx. 1-2 years of irrigation and deep ventilation.

Form of delivery: roll with width 80 cm and length 5, 20 or 60 m

Root curtain M (80 cm wide), 600 g/m<sup>2</sup>:

100 % biodegradable water storage and protection fleece for root curtain (pore content > 85%, fibre thickness < 2 dtex, weight > 600 g/m<sup>2</sup>, thickness min. 5.5 mm, maximum tensile strength lengthways/crossways > 330 N/5 (DIN EN 29073-3)). 100 % needle-punched cellulose fleece without chemical additives.

Fleece can be simply covered over at the end of the construction site and supports approx. 1-2 years of irrigation and deep ventilation.

Form of delivery: roll with width 80 cm and length 5, 20 or 60 m

Root curtain L (120 cm width), 330 g/m<sup>2</sup>:

100 % biodegradable water storage and protection fleece for root curtain (pore content > 85%, fibre thickness < 2 dtex, weight > 330 g/m<sup>2</sup>, thickness min. 3.5 mm, maximum tensile strength lengthways/crossways > 190 N/5 (DIN EN 29073-3)). 100 % needle-punched cellulose fleece without chemical additives.

Fleece can be simply covered over at the end of the construction site and supports approx. 1-2 years of irrigation and deep ventilation.

Form of delivery: roll with width 120 cm and length 5, 20 or 60 m

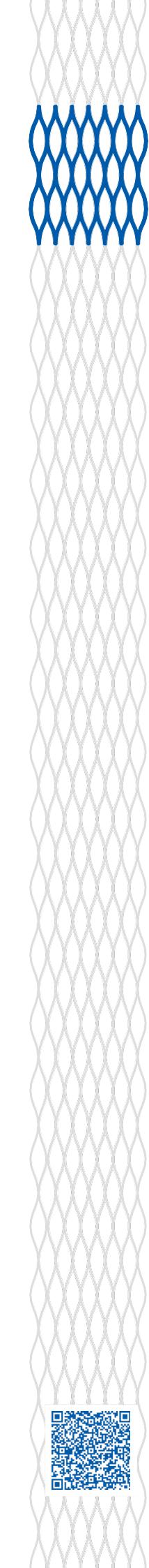
Root curtain L (120 cm width), 600 g/m<sup>2</sup>:

100 % biodegradable water storage and protection fleece for root curtain (pore content > 85%, fibre thickness < 2 dtex, weight > 600 g/m<sup>2</sup>, thickness min. 5.5 mm, maximum tensile strength lengthways/crossways > 330 N/5 (DIN EN 29073-3)). 100 % needle-punched cellulose fleece without chemical additives.

Fleece can be simply covered over at the end of the construction site and supports approx. 1-2 years of irrigation and deep ventilation.

Form of delivery: roll with width 120 cm and length 5, 20 or 60 m





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## 4.2 Root bandage in fleece form as biodegradable construction site protection with water storage function in 2 thicknesses:

Root bandage 330 g/m<sup>2</sup>:

100 % biodegradable root bandage to protect exposed roots on construction sites.

Water storage needle fleece made of 100 % cellulose without chemical additives to keep the roots moist and as mechanical and UV protection. Porosity > 85%, fibre thickness < 2 dtex, weight > 330 g/m<sup>2</sup>, thickness min. 3.5 mm, maximum tensile strength lengthways/crossways > 190 N/5 (DIN EN 29073-3).

Fleece can simply be covered over at the end of the construction site. Decomposition time approx. 1-2 years

Delivery form: roll with width 10 cm and length 8 m

Root bandage 600 g/m<sup>2</sup>:

100% biodegradable root bandage for the protection of exposed roots on construction sites.

Water storage needle fleece made of 100 % cellulose without chemical additives to keep the roots moist and as mechanical and UV protection. Porosity > 85%, fibre thickness < 2 dtex, weight > 600 g/m<sup>2</sup>, thickness min. 5.5 mm, maximum tensile strength lengthways/crossways > 330 N/5 (DIN EN 29073-3).

Fleece can simply be covered over at the end of the construction site. Decomposition time approx. 1-2 years

Form of delivery: roll with width 10 cm and length 8 m.

