



LITE-SOIL

All in ONE: Air-Soil-Water

Tender texts for slope products for permanent underground irrigation:

TECHNICAL CHARACTERISTICS

Our products are made of long-time proven nonwovens, which are optimized for any type of soil. Up to 90% of the volume consists of interconnected air pores, which can store water and redistribute it by capillary action. All the water is thus immediately available to plants. Our products are available in 3 different materials:

		weight	thickness
BIO5	PLA (70% PLA + 30% cellulose fibers) 100% biodegradable/compostable after approx. 5-10 years	500 g/m ²	6 mm
PP	PP (100% polypropylene fibers) durable, reusable and sustainable	360 g/m ² 600 g/m ²	3 mm 5 mm

			Bio5	PP	
			6 mm	3 mm	5 mm
LITE-STRIPS	Units	Weight in Kg: Bio1/Bio5/PP			
70 x 12 mm	1 m ³ BB	50/45/50	X		X
70 x 12 mm	5 x 50 l Box	12/11/12	X		X
70 x 12 mm	250 l Box	12/11/12	X		X
70 x 12 mm	60 l Box	3,8/3,5/3,8	X		X
LITE-NET *					
LITE-NET Standard (Roll C20 = meshes Ø 13 cm)					
175: 1,75 x 16,3 m	28 m ²	6/5/6	X		X
175: 1,75 x 16,3 m	3 pcs. á 28 m ²	18/14/18	X		X
350: 3,5 x 16,3 m	57 m ²	10/11	X		X
520: 5,2 x 16,3 m	85 m ²	14/16	X		X
520 XL: 5,2 x 25,9 m	275 m ²	300			X
BLUELITE-NET COMPONENTS					
BLUELITE-COVER	16 pcs. á 25 m	25		X	
BLUELITE-TUBE**	100 m	14		X	
BLUELITE-RING	10 pcs. á Ø 50 cm	4		X	
BLUELITE-NET SYSTEM:			LITE-NET Standard Roll PP + BLUELITE-TUBE		
BLUELITE-NET SYSTEM**	55 m ²	25			X
BLUELITE-NET SYSTEM**	85 m ²	38			X
BLUELITE-NET SYSTEM**	1200 m ²				X

** Drip irrigation tube:

A. Rivulis D5000

B. Rainbird XFD

C. Rainbird XFS

* Specifications are maximum sizes. Recommendation: For optimal results and easier installation, reduce the laying width e.g., instead of 5.2 m only 4 - 4.5 m (area reduction approx. 10 - 15%).

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Status July 2026, other sizes and materials on request





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Tender specification texts for underground slope products for permanent greening and irrigation:

1. LITE-**NET** Standard, roll material: water storage and distribution net
2. LITE-**STRIPS**: Water storage and aeration close to the roots in strip form
3. **BLUELITE-NET**: Water-saving underground irrigation

1. LITE-**NET** rolls:

For underground air and water supply in 3 sizes each, 2 materials and 2 thicknesses.
Installation at root depth.



Bio5



PP

Designation declaration, e.g. for Bio5 520 C20/6:

Bio5: there are 3 material variants: Bio1, Bio5 or PP

520: With a width of 520 cm pulled apart, the largest possible area is obtained

C20: Due to the cut length of 20 cm, the mesh size Ø is approx. 13 cm, net area approx. 85 m², (with C14 the cut length is 14 cm, the mesh size Ø approx. 9 cm, the net area approx. 75 m²) C20 is standard, C14 is for superficial slope planting.

/6: Thickness approx. 6 mm. For C20 there are 6 or 8 mm, for C14 there are 4- or 6-mm variants.

1.1 LITE-**NET** Standard roll Bio5 C20/6:

Net-shaped water storage nonwoven as vegetation aid, installed underground for conducting, distributing and temporarily storing water and air at the root level, cut from 100 %

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biodegradable/compostable PLA needle nonwoven (approx. 70 % PLA + 30 % cellulose, approx. **500 g/m²**, thickness approx. **6 mm**, pore content/water storage ≥ 85 %, **degradation time approx. 5-10 years**). Rootable drainage net with mesh size $\varnothing$ approx. 13 cm, can be pulled apart to at least 5 times the width.

Delivery form:

- a. **Bio5 175 C20/6: Net area max. 28 m²** with appr. 1,75 x 16,3 m.
roll with width appr. 0,4 m, length appr. 20 m, $\varnothing$ ca. 0,35 m, weight appr. 4,0 kg.
- b. **Bio5 350 C20/6: Net area max. 57 m²** with appr. 3,5 x 16,3 m.
roll with width appr. 0,8 m, length appr. 20 m, $\varnothing$ ca. 0,35 m, weight appr. 8 kg.
- c. **Bio5 520 C20/6: Net area max. 85 m²** with appr. 5,2 x 16,3 m.
roll with width appr. 1,2 m, length appr. 20 m, $\varnothing$ ca. 0,35 m, weight appr. 12 kg.

1.2 LITE-NET Standard roll PP C20/5:

Net-shaped water storage nonwoven as a **permanent** vegetation aid, installed underground for conducting, distributing and temporarily storing water and air at the root level, cut from PP - needle nonwoven (approx. **600 g/m²**, UV stabilized, thickness approx. **5 mm**, pore content/water storage ≥ 85 %, pore opening width $< 80 \mu\text{m}$ (EN ISO 12956), maximum tensile force $\geq 40 \text{ kN/m}$ (EN ISO 10319)). Rootable drainage net with **mesh size $\varnothing$ approx. 13 cm**, can be pulled apart to at least 5 times the width.

Delivery form:

- a. **PP 175 C20/5: Net area max. 28 m²** with appr. 1,75 x 16,3 m.
roll with width appr. 0,4 m, length appr. 20 m, $\varnothing$ ca. 0,35 m, weight appr. 4,8 kg.
- b. **PP 350 C20/5: Net area max. 57 m²** with appr. 3,5 x 16,3 m.
roll with width appr. 0,8 m, length appr. 20 m, $\varnothing$ ca. 0,35 m, weight appr. 9,6 kg.
- c. **PP 520 C20/5: Net area max. 85 m²** with appr. 5,2 x 16,3 m.
roll with width appr. 1,2 m, length appr. 20 m, $\varnothing$ ca. 0,35 m, weight appr. 14,4 kg.
- d. **PP 520 X20/5 XL: Net area max. 275 m²**, appr. 5.2 x 52.9 m. Roll with a width of appr. 1.2 m, length appr. 65 m, diameter appr. 0.35 m, weight appr. 14.4 kg.

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2. LITE-STRIPS:

As substrate improvement and near-root water storage for lawns, and slopes in 2 material variants:



Bio5



PP

2.1 LITE-STRIPS Bio5:

Water storage nonwoven in strip form (approx. 70/12/6 mm) for mixing into the soil as irrigation close to the roots and vegetation aid as well as for improving substrate permeability and against compaction, cut from 100 % **biodegradable/compostable** PLA needle nonwoven (approx. 70% PLA + 30 % cellulose, approx. 500 g/m², thickness approx. 6 mm, pore content/water storage $\geq$ 85%, water storage capacity up to approx. 10 l/kg, **degradation time approx. 5-10 years**).

Mixing ratio for lawns approx. 0.5 to 1.0 l per m²

Delivery form: 5 x 50l, 250l or 1000l (ca. 45 kg)

2.2 LITE-STRIPS PP:

Water storage nonwoven in strip form (approx. 70/12/5 mm) for mixing into the soil as irrigation close to the roots and vegetation aid as well as for improving substrate permeability and against compaction, cut from **durable** PP needle-punched nonwoven (approx. 600 g/m², UV stabilized, thickness approx. 5 mm, pore content/water storage $\geq$ 85%, water storage capacity up to approx. 10 l/kg, pore opening width < 80 μ m (EN ISO 12956), maximum tensile strength $\geq$ 40 kN/m (EN ISO 10319)).

Mixing ratio for lawns approx. 0.5 to 1.0 l per m²

Delivery form: 5 x 50l, 250l or 1000l (ca. 50 kg)

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3. BLUELITE-NET:

For **water-saving underground** irrigation of lawns, athletic fields, golf courses, green roofs, slopes, etc.

(system consisting of 2 components, a distribution net and a nonwoven-covered drip tube laid on top of it):



3.1 LITE-NET Standard roll PP (component 1):

C20/5 (1.2)

+

3.2 BLUELITE-TUBE (component 2):

Geotextile-wrapped drip irrigation pipe comprising:

a. Rivulis D5000 PCAS hose, 16 mm (13.8 mm inner Ø, 15.83 mm outer Ø), operating pressure 0.5–3.5 bar, wall thickness 40 mil (1.02 mm), emitter spacing 30 cm, flow rate 1.5 l/h, required filtration: 120 mesh, maximum lateral length 163 m at 3.5 bar.

b. Rain Bird XFD hose, 16 mm (13.6 mm inner Ø, 16.1 mm outer Ø), wall thickness 1.2 mm (49 mil), operating pressure 1.38–4.14 bar, flow rate 1.6 l/h, required filtration: 120 mesh, water temperature up to 37.8 °C, ambient temperature up to 51.7 °C, maximum lateral length 175 m at 4.14 bar (max. 32 m at 1.4 bar, max. 112 m at 2.1 bar).

c. Rain Bird XFS hose, 16 mm (13.6 mm inner Ø, 16.1 mm outer Ø), wall thickness 1.2 mm (49 mil), operating pressure 1.38–4.14 bar, flow rate 1.6 l/h, required filtration: 120 mesh, water temperature up to 37.8 °C, ambient temperature up to 51.7 °C, maximum lateral length 175 m at 4.14 bar (max. 32 m at 1.4 bar, max. 112 m at 2.1 bar).

Protective sleeve with water distribution function made of durable PP needle-punched nonwoven fabric (approx. 360 g/m², UV-stabilized, thickness approx. 3.3 mm, pore opening size < 90 µm (EN ISO 12956)), tensile strength ≥ 25 kN/m (EN ISO 10319), width approx. 5 cm, for installation on LITE-NET drainage geotextile mesh at a spacing of approx. 50–60 cm (fastening with ground staples if required).

Roll length: approx. 100 m.

Supply format: 55, 85 or 1200 m².

or

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3.3 BLUELITE-COVER (component 2, without drip irrigation tube):

Protective and distribution nonwoven cover for drip irrigation pipes, made of durable PP needle nonwoven (approx. 360 g/m², UV stabilized, thickness approx. 3.3 mm, pore opening width < 90 µm (EN ISO 12956)), maximum tensile force ≥ 25 kN/m (EN ISO 10319), width approx. 5 cm, for insertion of own or individual irrigation tubes for laying on LITE-NET drainage nonwoven net with spacing approx. 50 -60 cm (if required, fastening by means of plug-in bracket).

Roll length appr. 25 m.

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