



LITE-SOIL

All in ONE: Air-Soil-Water

Tender texts for slope products for permanent underground irrigation:

TECHNICAL CHARACTERISTICS

The 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. The products are available in polypropylene. Weight: 600g/m² (6 mm thickness), 900g/m² (8 mm thickness).

Products overview

		PP		
		4mm	6mm	8mm
LITE-STRIPS *				
70 x 12 mm	1 m ³ BB		X	
70 x 12 mm	5 x 50 l Box		X	
70 x 12 mm	250 l Box		X	
LITE-NET Standard (Roll C20 = meshes Ø 13 cm)**				
175: 1,75 x 16,3 m	28 m ²		X	
350: 3,5 x 16,3 m	57 m ²		X	X
520: 5,2 x 16,3 m	85 m ²		X	X
BLUELITE-NET				
BlueLite-Cover	25 m	X		
BlueLite-Tube	100 m	X		
BlueLite-Agri	100 m	X		

* LITE-STRIPS kg/m³: Bio1 = 50 kg | Bio5 = 45 kg | PP = 50 kg

** : the m² dimensions are maximum sizes. Recommendation: for optimal results and easier installation, reduce design width e.g., instead of 5.2 m only 4 - 4.5 m (area reduction approx. 10 - 15%).

Lite-Soil GmbH | Neustiftgasse 94/23, A-1070 Vienna | +43 1 5227310 | office@lite-soil.com | www.lite-soil.com

Status June 22, 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 \varnothing is approx. 13 cm, net area approx. 85 m², (with C14 the cut length is 14 cm, the mesh size \varnothing 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 %

biodegradable/compostable PLA needle nonwoven (approx. 70 % PLA + 30 % cellulose, approx. 500 g/m², thickness approx. 6 mm, pore content/water storage \geq 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.

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Delivery form:

- 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, Ø ca. 0,35 m, weight appr. 4,0 kg.
- 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, Ø ca. 0,35 m, weight appr. 8 kg.
- 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, Ø ca. 0,35 m, weight appr. 12 kg.

1.2 LITE-NET Standard roll PP C20/6:

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. **6 mm**, pore content/water storage $\geq 85\%$, 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 Ø approx. 13 cm**, can be pulled apart to at least 5 times the width.

Delivery form:

- PP 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, Ø ca. 0,35 m, weight appr. 4,8 kg.
- PP 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, Ø ca. 0,35 m, weight appr. 9,6 kg.
- PP 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, Ø ca. 0,35 m, weight appr. 14,4 kg.

1.3 LITE-NET Standard rolls PP C20/8:

Net-shaped water storage nonwoven as a **permanent** vegetation aid, installed underground for conducting, distributing and temporarily storing water and air in the, cut from PP needle-punched nonwoven (approx. **900 g/m²**, UV stabilized, thickness $\geq 7 \text{ mm}$, pore content/water storage $\geq 85\%$, pore opening width $\leq 65 \mu\text{m}$ (EN ISO 12956), maximum tensile force $\geq 60 \text{ kN/m}$ (EN ISO 10319)). Rootable drainage net with **mesh size Ø approx. 13 cm**, can be pulled apart to at least 5 times the width.

Delivery form:

- PP 350 C20/8: Net area max. 57 m²** with appr. 3,5 x 16,3 m.
roll with width appr. 0,8 m, length appr. 20 m, Ø ca. 0,43 m, weight appr. 14,4 kg.
- PP 520 C20/8: Net area max. 85 m²** with appr. 5,2 x 16,3 m.
roll with width appr. 1,2 m, length appr. 20 m, Ø ca. 0,43 m, weight appr. 20 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 ≥ 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. 70/12/6 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 **durable** PP needle-punched nonwoven (approx. 600 g/m², UV stabilized, thickness approx. 6 mm, pore content/water storage ≥ 85%, water storage capacity up to approx. 10 l/kg, pore opening width < 80 µm (EN ISO 12956), maximum tensile strength ≥ 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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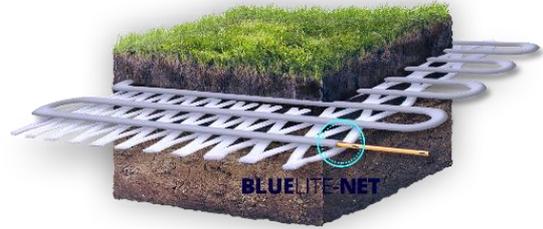
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3. BLUELITE-NET:

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):

Distribution net with 2 thicknesses, C20/6 or C20/8 (1.2 and 1.3)

+

3.2 BLUELITE-TUBE (component 2):

Nonwoven covered drip irrigation tube (16.1 mm drip pipe for 17 mm push-in connections, wall thickness 1.2 mm, pressure-compensated drippers at 33 cm intervals, each with 2.3 l/hour. Flow rate at 0.59-4.14 bar. Required filtration 124 microns. It is recommended to use ½ " aeration and deaeration valve).

Protective nonwoven cover with water distribution function made of durable PP needle nonwoven (approx. 380 g/m², UV stabilized, thickness approx. 3.5 mm, pore opening width < 90 µm (EN ISO 12956)), maximum tensile force ≥ 25 kN/m (EN ISO 10319), width approx. 6 cm, for laying on LITE-NET drainage nonwoven mesh with spacing approx. 50 - 60 cm (if required, fastening by means of plug-in bracket).

Roll length appr. 100 m.

or

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. 380 g/m², UV stabilized, thickness approx. 3.5 mm, pore opening width < 90 µm (EN ISO 12956)), maximum tensile force ≥ 25 kN/m (EN ISO 10319), width approx. 6 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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