

RENOLIT ALKORPLAN 35034 GREEN Geomembrane for tunnels and basement works Non UV



→ PRODUCT

- Non-reinforced geomembrane PVC-P bi-color green (optional totally green or all black), designed for tunnels and basement works. This geomembrane is not suitable for permanent exposure to UV-radiation.
- The use of a geomembrane with a clear colour allows a better enlightenment in the tunnel under construction through reflection of the artificial lights.

→ CHARACTERISTICS

- Manufactured in ISO 9001 & ISO 14001 certified plant.
- Mechanical properties in accordance with EN 13491.
- CE marking.
- Hardly combustible (B2 - DIN 4102, IV.2 - SIA 280, B2 - ÖN B 3800/1, class E - EN 11925).
- Resistant to swelling, rotting and ageing.
- Very high level of water tightness, even under permanent deformation.
- High capacity for adaptation to irregularities or deformation of support due to its high deformability and welding strength.
- High resistance to puncturing.
- Root resistance in accordance with EN 14416.
- Not resistant to bitumen, oil and tar.

→ INSTALLATION

- Hot air or hot wedge welding achieves correct assembly of the geomembrane. The weld ability and the quality of the welding done on site can be influenced by atmospheric conditions (temperature, humidity of the air) and also by the state of surface of the geomembrane (clean and dry) and must be adapted accordingly.
- An anti-puncturing geotextile or a composite (protective membrane with laminated fleece) should be placed onto the support of the waterproofing.
- In case the geomembrane is covered with sand, gravel or concrete a geotextile or a protection membrane of non reinforced PVC-P RENOLIT ALKORPLAN 35020 (protection against dynamic puncturing) should be placed in between.
- The geomembrane can be used on a bituminous support after the insertion of a suitable separation layer.

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Geomembrane for tunnels and basement works

Non UV

→ CHARACTERISTICS	NORMS	UNITS	SPECIFICATIONS		
Thickness	EN 1849-2	mm	1.5 ±5%	2.0 ±5%	3.0 ±5%
Tensile strength	EN ISO 527	N/mm ²	≥ 16		
Elongation at failure	EN ISO 527	%	L: ≥ 280 T: ≥ 280		
Tear strength	DIN 53363 EN ISO 34	N/mm kN/m	≥ 80 ≥ 40		
Dimensional stability after accelerated ageing (6h/80°C)	EN ISO 1107-2	%	≤ 2		
Puncture resistance (CBR)	EN ISO 12236	kN	≥ 1.7	≥ 2.4	≥ 3.0
Height of fall without perforation	DIN 16726	mm	≥ 750	≥ 1100	≥ 1700
Cold folding resistance	EN 495-5		No cracks at -20°C		
Resistant under water pressure	DIN 16726		Waterproof at 10 bar/10 h Waterproof at 6 bar/72 h		
Behaviour after storage in hot water (8 months/50°C) - Mass variation. - Variation of elongation at failure - Variation of tensile strength. Folding at a temperature of -20°C	SIA.V 280	% % %	≤ 4 ≤ 20 ≤ 20 No cracks at -20°C		
Behaviour after long-term ageing 80°C / 7 days - General appearance - Dimensional stability, L&T - Variation of tensile strength, L&T - Variation of elongation at failure, L&T Folding at a temperature of -20°C	DIN 16726 5.13.3 5.14 5.18	% % %	No blister ≤ 3 < ±10 < ±10 No cracks at -20°C		
Behaviour after storage in hot water/or alkaline solutions. Cambiar por 90 d/23°C. Methods A&B. - Variation of tensile strength, L&T - Variation of elongation at failure, L and T Folding at a temperature of -20°C	EN 14415	% %	< ±20 < ±20 No cracks at -20°C		
Oxidation resistance	EN 14575		Fulfilled		
Root resistance	EN 14416		Fulfilled		
Behaviour in fire	ÖN B 3800/1 SIA 280 DIN 4102 EN ISO 11925		B2 IV.2 B2 Class E		

We reserve the right to amend or change specifications as and when required. We will be pleased to advise current specifications upon request.
Other technical characteristics are available upon request.

→ STORAGE

- Store in a dry unheated space. Rolls to be parallel and in original packing. Do not stack in cross form or under pressure. The storage area must be of such nature as not to damage the geomembrane.
- Available width considering the thickness:

THICKNESS	WIDTH
1,5 mm	2,15 m
≥2,0 mm	2,05 / 2,15 m