

RENOLIT ALKORPLAN 35054 ASQUAL
Hydraulic engineering and environmental protection structures
UV Resistant



→ **PRODUCT**

- Homogenous geomembrane made of flexible polyvinyl chloride (PVC-P), dark grey.
- Designed for hydraulics works such as lagoons, dams, canals.
- High UV stability (please contact our technical service for required thickness and installation conditions in relation with the geographical location).

→ **CHARACTERISTICS**

- Geomembrane ASQUAL certified.
- Geomembrane in accordance with the requirements of the ISO 9001 and ISO 14001 certificate.
- Resistant to swelling, rotting and ageing.
- Geomembrane produced with high quality resins, this guarantees high consistency of properties and optimum durability.
- Mechanical properties in accordance with EN 13361, EN 13362, EN 13492 and EN 13493.
- Very high level of water tightness, even with permanent deformation.
- Large capacity for adaptation to irregularities or deformation of support owing to its high deformability and weld strength.
- High resistance to puncturing.
- Root resistance in accordance with EN 14416.

→ **INSTALLATION**

- Hot air or hot wedge welding achieves assembly of the geomembrane or prefabricated panels. 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 the surface of the geomembrane (clean surface, more or less wetness of the surface) and must be adapted accordingly.
- Generally when laying gravely sand, gravel, selected fill or concrete on a geomembrane, 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.

RENOLIT ALKORPLAN 35054 ASQUAL

Hydraulic engineering and environmental protection structures

UV Resistant

| → CHARACTERISTICS | NORMS | UNITS | SPECIFICATIONS | | |
|---|---------------------------|-------------------------------------|-------------------------|----------------|----------------|
| Thickness | EN 1849-2 | mm | 1.00 -0 +6% | 1.20 -0 +6% | 1.50 -0 +6% |
| Density | EN ISO 1183 ASTM D 792 | g/cm ³ | 1.24 +-5% | | |
| Tensile strength | EN ISO 527 | N/mm ² | ≥ 17.5 | | |
| Elongation at failure | EN ISO 527 | % | L: ≥ 300 T: ≥ 300 | | |
| Static puncture resistance (CBR) | EN 12236 | kN | 1.50 +-10% | 1.80 +-10% | 2.30 +-10% |
| Static puncture | NF P 84-507 | Resistance N | 280 -10% | 300 -10% | 400 -10% |
| | | Displacement mm | 25 -15% | 25 -15% | 25 -15% |
| Traction resistance with 15% deformation, L&T | NF EN 12311-2 | kN/m | 2.0 -10% | 2.5 -10% | 3.0 -10% |
| Traction resistance with 250% deformation, L&T | | kN/m | 14 -15% | 17 -15% | 21 -15% |
| Tear strength | ISO 34 | kN/m | ≥ 40 | | |
| Resistant under water pressure | DIN 16726 | | Waterproof at 6bar/72 h | | |
| Biaxial deformation | NF P 84-503 | | Without rupture | | |
| Dimensional stability after accelerated ageing (6h/80°C) | EN ISO 1107-2 | % | ≤2 | | |
| Behaviour after long-term ageing 56d/50°C. Methods A&B. General appearance | EN 14415 | % | No blister | | |
| - Dimensional stability, L&T | | | ≤2 | | |
| - Variation of tensile strength, L&T | | | < ±10 | | |
| - Variation of elongation at failure, L&T | | | < ±10 | | |
| Folding at a temperature of - 20°C | | | No cracks at - 20°C | | |
| Resistant to artificial weathering | EN 12224 | | Fulfilled (< 25%) | | |
| Water permeability | EN 14150 | m ³ /m ² /day | 10 ⁻⁶ | | |
| | NF P 84 515 | | Fulfilled | | |
| Oxidation resistance 90d/85°C | EN 14575 | | Fulfilled (< 15%) | | |
| Stress cracking resistance | ASTM D5397-99 | | Not relevant | | |
| Cold folding resistance | EN 495-5 | | No cracks at -20°C | | |
| Root resistance | EN 14416 | | Fulfilled | | |

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 a nature as not to damage the geomembrane.
- Available width considering the thickness:

| THICKNESS | WIDTH |
|-----------|--------|
| 1,0 mm | 2,10 m |
| 1,2 mm | 2,15 m |
| 1,5 mm | 2,15 m |