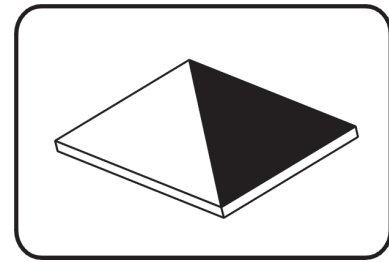


● **Tunnel Liner**
 width: 2m
 coextruded/calendered

● **Hot-wedge-welding**

● **AGRUFLEX VLDPE 2 colours**



Code 60.609

| Property | Standard | Unit | AGRUFLEX Tunnel Liner |
|--|---|-------------------|--|
| Surface | DIN 16726 | - | no tears, bubbles, pores or damages |
| Visual inspection | section 5.1 | | complete connection between ground material and signal layer |
| Straightness | DIN 16726 | mm | ≤ 50 |
| Flatness | section 5.2 | | ≤ 10 |
| Nominal thickness (incl. signal layer) ¹⁾ | DIN 16726 | mm | 4,0 ; 3,0; 2,0; |
| Average Value | section 5.3.1 | | ≥ nominal thickness |
| Minimum value | | | average value - 5% |
| Maximum value | | | average value + 5% |
| Thickness of signal layer | | mm | 0,2 |
| Density | DIN EN ISO 1183 | g/cm ³ | ≥ 0,9 |
| Melt Flow Rate MFR (190°/2,16kg) | DIN EN ISO 1133/4 | g/10 min | 0,7-1,3 |
| Break Strength | DIN 16726 section 5.6.1 | N/mm ² | ≥ 15 |
| Elongation at Break | table 1: A-VII DIN EN ISO 527 | % | ≥ 500 |
| E-Modulus between 1 and 2 % elongation length and crosswise | DIN 16726 section 5.6.2 table 1: A-II | N/mm ² | ≤ 100 |
| Multiaxial tension | following DIN 53861 Ø 1,0 m | % | ≥ 50 |
| Slit Pressure Resistance | DIN 16726 section 5.11 (72 h/6 bar) | - | tight |
| Puncture Resistance (Drop Test) | DIN 16726 section 5.12 750 mm, 500 g | - | tight |
| Heat Reversion/Dimensional Stability (80°C/6h)* | DIN 16726 section 5.13.1 | % | ± 2,0 |
| Visual appearance after heat reversion | section 5.13.2 | - | no bubbles |
| Low Temperature Brittleness (-20 °C) | DIN 16726 section 5.14 | - | fulfilled - no tears |
| Behaviour after heat aging (70 d, 80 °C) | DIN 16726 | % | change of tensile strength and of elongation at break as received ≤ 20 |
| Behaviour after storage in warm water (8 months, 50 °C) | SIA-V 280 test Nr. 13 | % | change of tensile strength and of elongation at break as received ≤ 20; change of weight ≤ 4 |
| Behaviour after storage in watersoluble agents a) saturated lime water dilution b) 5-6 % sulfuric acid | DIN 16726 section 5.18 | % | change of tensile strength and of elongation at break as received ≤ 20 |
| Flammability Classification | DIN 4102/EN 13501-1 | - | B2 / Class E |

*)tunnel liners with refractory deformation temperature <100°C

1) for Germany signal layer excluded

The data in this table are approximate values and based upon results of the internal inspection, data of raw material suppliers as well as tests in the course of approval procedures and external inspections. The results can differ slightly from the indicated mean values in longitudinal and transverse direction and due to different nominal thicknesses and raw materials. In any case requirements relating to a special project (tender documents) have to be agreed with AGRU.

Independent of the indicated test standards, internal tests and data on test certificates are generally carried out in accordance with the appropriate test procedures according to OENORM (Austrian Standard) resp. DIN (German Standard).

AGRU assumes no liability in connection with the use of this data. The specifications on this sheet are subject to change without notice.

*) acc. OENORM S2073 liners made of polyolefins shall be considered resistant without proof being furnished.