

Place and date of initial registration	Dresden, May 2019 (Germany)	
Dimension range	DN 200 – DN 600	
Wall thickness in cured condition	3 – 6 mm	
Number of layers	minimum 3	
Longitudinal seam	none	
Winding	none	
Permissible elongation	2 %	
Liner construction as outlined in	DIBt approval, appendix 1 and 2	
Specific density according to DIN EN ISO 1183-2	1.6 g/cm ³ ± 0.5 g/cm ³	
Glass content according to DIN EN ISO 1172	≥ 50% (by mass)	
Mean abrasion depth after 100,000 load cycles according to DIN-EN 295-3 (Darmstadt tipping trough)	0,09 mm	
Barcol hardness according to DIN EN 59	≥ 40 IRHD	
Application	municipal wastewater, rainwater, sewage	
Dimension groups	≤ 200	> 200
Short-term circumferential E-Modulus according to DIN EN 1228 DIN EN ISO 11296-4:2011	≥ 8,200 N/mm ²	≥ 15,700 N/mm ²
Long-term circumferential E-Modulus* _{ex 50 years} according to DIN EN 761	5,942 N/mm ²	11,893 N/mm ²
Short-term bending E-Modulus according to DIN EN ISO 178 and DIN EN ISO 11296-4:2011	≥ 8,500 N/mm ²	≥ 13,750 N/mm ²
Short-term bending strength according to DIN EN ISO 178 and DIN EN ISO 11296-4:2011	≥ 273 N/mm ²	≥ 152 N/mm ²
Long-term bending strength* _{ex 50 years} according to DIN EN 761	197 N/mm ²	115 N/mm ²
Retention factor A* after 10 000 h according to DIN EN 761	1.38 / 72 %	1.32 / 76 %
Creep behaviour after 24 h according to DIN EN ISO 899-2	≤ 7 %	≤ 7 %

* These values are used for the static calculation of the Liner stability according to DWA-A 143-2.

Status: 18. Nov. 2024