



OMEGA

Omega-Liner Technical Data Summary

LINER COMPANY

Omega-Liner™ Technical Data

Company Information

Certification Owner	Omega UV Liner Company
Location	Canton, South Dakota

Product Information

Product name	Omega UV Liner
Manufacturing since	2017
Environmentally friendly	No discharge of contaminated water or condensate.
Low carbon footprint	minimal fuel consumption
Inflate procedure	Low pressure high volume blower
Curing method	UV or LED Light
Installation technique	Pull-in Place
Impregnation Location	Manufacturers plant only
Certification	ISO 9001:2015
MSDS Sheet	Available
Resin System(s)	Unsaturated Polyester or Vinyl Ester
Diameter range	6" (150mm) to 66" (1676mm)
Special profiles	Circumferences up to 207 inches
Pipe Transitions	Yes (Example: 15" to 18")

Liner Physical Properties

Reinforcement	EC-R Glass
Chemical resistance	According to ASTM D 543
Barcol hardness according to ASTM 2583	≥ 40
Recovery period	Minimum 50 yrs
Maximum residual styrene content after curing	≤ 3 %
Short-term Flexural Modulus ASTM D 790	2,200,000 psi
Long-term Flexural Modulus ASTM D790	1,460,800 psi
Short-term Flexural Strength ASTM D790	30,000 psi
Long-term Flexural Strength ASTM D790	19,920 psi
Poisson's ratio according ASTM E3039	< 3
Retention factor after 10.000 h Per ASTM D2990	50y = 66.4%
Creep behavior after 24 h per ASTM D2990	< 10 %

LINEER COMPANY

Material Information

Inner Foil

Material	PE / PA
Thickness of foil	6 mils

Outer Protective Foils

Material	PE / PA / PE
Thickness of outer foil	8 mils

Outer Fleece

Material	PP / PP
Outer Fleece Thickness	.35 mm

Reinforcement

Reinforcement material	Glass fiber stitch bonded fabric, non-woven
Textile glass type	EC-R Glass Fiber
Expansion in radial direction	4.0 %
Stretching in axial direction	0 %

Gliding Foil

Material	PE
Thickness of foil	21 mils

LINEER COMPANY

Resin System Data:

UP resin group according to DIN 18820/1 & DIN EN 13121/1	3 & 4
UP resin type according to DIN 16946/2	1140
VE resin type according to DIN 16946/2	1310
UP resin based on	Isophthalic acid / Neopentyl glycol
Curing Agents	UV-Curing: UV-initiators
Reaction shrinkage of the pure resin	8 %
Content of styrene before curing	Approx. 39-42 %
Barcol Hardness in accordance with ASTM D2583	48
Tensile Elongation in accordance with ASTM D638	3.1%

Resin Physical Data

Viscosity, @77°F/25°C, RVF Brookfield Spindle #2 @ 20 rpm	800 cps
Peak Exotherm	356°F - 419°F
Flash Point	88 °F