

## COMPOSITION

Synthetic liner of TPO modified polyolefin, with fiber reinforced composite, in two-colour version (green/black), obtained by co-extrusion, which allows to produce in a single layer a liner with different physical-chemical properties on the two sides.

The upper green layer, exposed, is characterised by very high resistance to weathering and ultraviolet rays, whereas the lower black layer is resistant to puncturing and to roots.

Manufactured in UNI EN ISO 9001:2000 (Quality System) and UNI EN ISO 14001:2004 (Environmental System) certified plant.

Resistant to weathering and ultraviolet rays.

Laying by installers approved by Flag S.p.A.

Finishing and accessories with elements manufactured and approved by Flag S.p.A.

## FEATURES

- Resistance to weathering and ultraviolet rays
- Dimensional stability
- Will not rot
- Mechanical and puncturing resistance
- Flexibility at low temperatures
- Excellent weldability
- High environmental compability

## AREA OF USE

### HYDRAULIC WORKS

- Reservoirs
- Earth reinforced concrete tanks with full/empty cycles
- Waterproofing basins subject to bacteria
- Canals

## PHYSICAL-CHEMICAL PROPERTIES

	FLAGON Geo P 120	FLAGON Geo P 150	FLAGON Geo P 180	FLAGON Geo P 200	Testing method
Thickness (mm)	1,2	1,5	1,8	2,0	UNI EN 1849 - 2
Weight (kg/m <sup>2</sup> )	1,26	1,58	1,89	2,10	UNI EN 1849 - 2
Tensile strenght (dumb-bell test specimen) (N/mm <sup>2</sup> )	≥ 10	≥ 10	≥ 10	≥ 10	UNI EN ISO 527 - 3
Elongation to break (dumb-bell test specimen) (%)	≥ 550	≥ 550	≥ 550	≥ 550	UNI EN ISO 527 - 3
Resistance to impact strength (mm)	≥ 400	≥ 700	≥ 900	≥ 1100	DIN 16726-5.12
Cold bending (°C)	≤ -35	≤ -35	≤ -35	≤ -35	UNI EN 495 - 5
Hydrostatic pressure resistance (6 hours at 0,5 MPa)	waterproof	waterproof	waterproof	waterproof	UNI EN 1928 met. B
Root resistance	no penetration	no penetration	no penetration	no penetration	DIN 4062
Tear resistance (N/mm)	≥ 45	≥ 45	≥ 45	≥ 45	ISO 34 specimen fig. 2
Resistance to static punching (CBR) (N)	≥ 750	≥ 1000	≥ 1200	≥ 1350	UNI EN ISO 12236
Resistance to oxidation tensile strenght variation (%)	< 25	< 25	< 25	< 25	UNI EN 14575
Resistance to weathering (12000 h) tensile strenght variation (%)	< 25	< 25	< 25	< 25	UNI EN 12224
Resistance to leaching tensile strenght variation (%)	< 25	< 25	< 25	< 25	UNI EN 14415 method A and B
loss in mass (%)	< 5	< 5	< 5	< 5	

## PRODUCTION STANDARD

Thickness	1,2 mm	1,5 mm	1,8 mm	2,0 mm	2,5 mm
Width	2,10 m	2,10 m	2,10 m	2,10 m	2,10 m
Length	25 m	20 m	20 m	20 m	20 m
Colour	Light green / black *				

\* Available in black colour

## ACCESSORIES SYSTEM

- FLAGON TPO for detail work (Flagon EP/S)
- Prefabricated accessories (corners, rain water outlet ecc.)
- FLAGON TPO cleaner
- Flexocol TPO (for vertical surface)
- TPO Flagmetal sheet - perimeter profile -termination strip - strip

Due to its formulation, the liner is NOT subject to the requirements set forth in the EEC 79/831 regulation on dangerous substances. If the product should be disposed of as waste, we recommend sending it to an authorised landfill site or to an incinerator equipped with post-combustion chamber and fume washing system.



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