

Unique identification code of the product-type: **FLAGON BSL**

Intended uses: **- PVC membrane for waterproofing of tunnels and underground structures (EN 13491:2013)**
- PVC membrane for waterproofing for rising damp from the ground (EN 13967:2012)

Manufacturer: **SOPREMA srl**
Via Industriale dell'Isola, 3
24040 CHIGNOLO D'ISOLA (BG) - Italia
www.soprema.it

Authorised representative: **Not applicable**

Systems of AVCP: **System 2+**

Harmonised standard: **EN 13491:2013**
EN 13967:2012

Notifies bodies: **Notified Body No. 1085**
OFI Technologie & Innovation GmbH

Declared performances:

Essential characteristics	Test method	Performance	Harmonised technical specification
Reaction to fire	EN 13501-1	E	EN 13967:2012
Water tightness at 2kPa and 60kPa	EN 1928 met. B	watertight	
Tear resistance (N)	EN 12310-1	thickness 1,5 mm > 375	
thickness 1,9 mm		> 475	
thickness 2,0 mm		> 500	
thickness 2,2 mm		> 550	
thickness 2,5 mm		> 625	
thickness 3,0 mm		> 750	
Joint strength (N/50mm)	EN 12317-2	thickness 1,5 mm > 750	
thickness 1,9 mm		> 950	
thickness 2,0 mm		> 1100	
thickness 2,2 mm		> 1150	
thickness 2,5 mm		> 1250	
thickness 3,0 mm		> 1500	
Resistance to impact (mm)	EN 12691	thickness 1,5 mm ≥ 450	
thickness 1,9 mm		≥ 750	
thickness 2,0 mm		≥ 750	
thickness 2,2 mm		≥ 800	
thickness 2,5 mm		≥ 900	
thickness 3,0 mm		≥ 1200	
Tensile properties:	EN 12311-2	- Tensile strength (N/mm ²)	
longitudinal		> 15	
transverse		> 14	
- Elongation (%)			
longitudinal	> 300		
transverse	> 280		
Resistance to static loading (kg)	EN 12730	> 20	
Durability:	EN 1296 EN 1847	- against ageing at 2kPa and 60 kPa watertight	
- against chemicals at 2kPa and 60 kPa		watertight	

Essential characteristics	Test method	Performance	Harmonised technical specification
Tensile strength: - Longitudinal (MD) (N/mm ²) - Transversal (CMD) (N/mm ²)	EN ISO 527-3	> 15,2 (-0,20 N/mm ²) > 14,2 (-0,20 N/mm ²)	EN 13491:2013
Resistance to static puncture (kN) thickness 1,5 mm thickness 2,0 mm thickness 2,2 mm thickness 2,5 mm thickness 3,0 mm thickness 3,1 mm thickness 3,3 mm thickness 3,5 mm	EN ISO 12236	> 1,70 (-0,10 kN) > 2,40 (-0,20 kN) > 2,60 (-0,20 kN) > 2,97 (-0,17 kN) > 3,60 (-0,20 kN) > 3,60 (-0,20 kN) > 3,80 (-0,20 kN) > 4,00 (-0,20 kN)	
Water permeability:	EN 14150	< 10⁻⁶ m³ m⁻² d⁻¹	
Durability: - Oxidation, variation in tensile properties (%) - Environmental stress cracking	EN 14575 ASTM D 5397	≤ 25 not applicable	

The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by: **Mr. BROCCANELLO Bruno, Managing Director**
Chignolo d'Isola, 01/10/2017

