



Unique identification code of the product-type: **FLAGON EP/PR  
FLAGON EP/PR Energy Plus (white version)**

Intended uses: **TPO membrane for waterproofing of roofing (EN 13956:2012)  
TPO membrane for use in the construction of liquid waste disposal sites, transfer station or secondary containment. Exposed application (EN 13492:2004+A1:2006)**

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 13956:2012  
EN 13492:2004+A1:2006**

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

Declared performances:

Essential characteristics	Test method	Performance	Harmonised technical specification
External fire performance	EN 13501-5	<b>F<sub>ROOF</sub></b>	<b>EN 13956:2012</b>
Reaction to fire	EN ISO 11925-2 EN 13501-1	<b>E</b>	
Watertightness	EN 1928 met. B	<b>pass</b>	
Tensile properties: - Tensile strength (N/50mm) - Elongation (%)	EN 12311-2 met.A EN 12311-2 met.A	<b>≥ 1100</b> <b>≥ 15</b>	
Resistance to impact (mm) thickness 1,0 mm thickness 1,2 mm thickness 1,5 mm thickness 1,6 mm thickness 1,8 mm thickness 2,0 mm thickness 2,2 mm thickness 2,4 mm	EN 12691 met. A	<b>≥ 350</b> <b>≥ 450</b> <b>≥ 800</b> <b>≥ 800</b> <b>≥ 900</b> <b>≥ 1250</b> <b>≥ 1250</b> <b>≥ 1500</b>	
Resistance to static loading (kg)	EN 12730	<b>≥ 20</b>	
Tear resistance (N)	EN 12310-2	<b>≥ 300</b>	
Joint strength: - Peel resistance (N/50mm) - Shear resistance (N/50mm)	EN 12316-2 EN 12317-2	<b>≥ 200</b> <b>≥ 600</b> <b>break out joint</b>	
Foldability at low temperature	EN 495-5	<b>≤ -40°C</b>	
Resistance to root	EN 13948	<b>resistant</b>	
Durability: Exposure to UV radiation, elevated temperature and water	EN 1297	<b>grade 0</b>	
Dangerous substances	-	<b>conforms</b>	



Essential characteristics	Test method	Performance	Harmonised technical specification
Tensile strength: - Longitudinal (MD) (N/50mm) - Transversal (CMD) (N/50mm)	EN ISO 527 - 4	> <b>1150</b> (- 50 N/50mm) > <b>1150</b> (- 50 N/50mm)	<b>EN 13492:2004 +A1:2006</b>
Resistance to static puncture (kN) thickness 1,2 mm thickness 1,5 mm thickness 1,8 mm thickness 2,0 mm thickness 2,5 mm thickness 3,0 mm	EN ISO 12236	> <b>2,35</b> (- 0,05 kN) > <b>2,65</b> (- 0,05 kN) > <b>2,85</b> (- 0,05 kN) > <b>2,95</b> (- 0,05 kN) > <b>3,25</b> (- 0,05 kN) > <b>3,65</b> (- 0,05 kN)	
Water permeability	EN 14150	< <b>10<sup>-6</sup>m<sup>3</sup>m<sup>-2</sup>d<sup>-1</sup></b>	
Gas tightness	ASTM D 1434	<b>not applicable</b>	
Durability: - Oxidation, variation in tensile properties (%) - Environmental stress cracking (h) - Weathering, variation in tensile properties (%)	EN 14575 ASTM D 5397 EN 12224	≤ <b>25</b> ≥ <b>200</b> ≤ <b>25</b>	
Dangerous substances	-	<b>none</b>	

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, 27/10/2020**