### **USE - APPLICATION**

FLAGON E is a thermoplastic membrane made of PVC-P, specifically designed for antipollution tanks, reservoirs used to collect wasted water and liquid manure tanks and also where the waterproofing is in contact with bacterial agents. It is extremely resistant to attacks by biological organisms such as fungus, bacteria and spores.

To verify the compatibility with the specific chemical liquids, please contact the technical office CIVILROCK.

FLAGON E membrane is also resistant to the weather and UV rays.

The sheets are welded together by applying hot air or using hot wedge, with manual or automatic welder. The welding can be made either with a track that with double track. The double track allow to perform a pneumatic test with air.

FLAGON E is compatible with all the accessories and membranes in the FLAGON PVC range.

### DESCRIPTION

FLAGON E membrane is a synthetic multi-ply membrane made by co-extrusion from PVC-P with high resistance to attack by micro-organism, that is dark grey in colour.

CIVILROCK attaches the highest importance to the quality of its products. This is why we operate a quality assurance system according to ISO 9001 BSI certified.

### **MAIN ADVANTAGES**

- High resistance to attack by micro-organisms
- High resistance to weathering and UV rays
- High mechanical resistance
- High resistance to perforation by roots

#### SUGGESTED INSTALLATION EQUIPMENT

- Manual welding with hot air
- Automatic welding machine with hot air
- Automatic welding machine with double track

CIVILROCK reserves the right, as technology and know-how progress, to modify without warning the composition and conditions of use of its materials, and subsequently their price. As a result, orders shall only be accepted on the basis of the terms and technical specifications applicable at the time of receipt.



FLAG S.p.A. – SOPREMA GROUP

Via Industriale dell'Isola, 3 – 24040 – Chignolo d'Isola (BG) - Italia Tel. : +39 035 095.10.11 - Fax : +39 035 494.06.49 www.flag-on.com e-mail: tech-office@flag.it www.soprema.it

## Technical data sheet No. WPSIT0027-17.01 Cancels and replaces WPSIT0027-14.04 (ENG)

# FLAGON E 1.5 and 2.0 mm PVC-P MEMBRANE FOR TANKS WITH ACID LIQUIDES

## **CHARACTERISTICS**

|  | Standard             | E 1.5   | E 2.0   |       |
|--|----------------------|---|---------|-------|
| Tensile strength (N/mm²)   | EN 527-3             | > 17,5 (L/T)  |         |       |
| Static puncture resistance (N)   | EN 12236             | > 1 800   | > 2 450 | 5     |
| Water permeability   | EN 14150             | < 10 <sup>-6</sup> m <sup>3</sup> m <sup>-2</sup> d <sup>-1</sup> |         | N 133 |
| Durability:<br>Oxidation, variation in tensile properties (%)<br>Weathering, variation in tensile properties (%) | EN 14575<br>EN 12224 | ≤ 25<br>≤ 25  |         |       |

|   | Standard                        | E 1.5             | E 2.0             |
|---|---------------------------------|-------------------|-------------------|
| Thickness (mm)  | EN 1849-2                       | <b>1.5 (</b> ±5%) | <b>2.0 (</b> ±5%) |
| Mass per unit area (kg/m²)  | EN 1849-2                       | 1.95              | 2.60              |
| Breaking strength (%)   | EN 527-3                        | ≥ <b>300</b>      |                   |
| Cold bending (°C)   | EN 495-5                        | ≤ <b>-30</b>      |                   |
| Water permeability after 6 hrs at 0.5Mpa                                    | EN 1928 (B)                     | Watertight        |                   |
| Resistance to perforation by roots  | CEN TS 14416                    | No perforation    |                   |
| Resistance to micro-organism  | AFNOR NFX 41514<br>ASTM G 21-90 | No proliferation  |                   |
| Resistance to thermal ageing in water:<br>variation in tensile strength (%) | EN 14415 (A et B)               | < 25<br>< 5       |                   |
| mass loss (%)   |                                 |                   |                   |

## **PRODUCTION STANDARD**

| Thicknesses                    | 1.5mm  | 2.0mm |  |
|--------------------------------|--|-------|--|
| Number of rolls on each pallet | 23   | 18    |  |
| Roll length / width            | 20ml (other lengths available on request) / 2.10ml |       |  |
| Colours available              | Dark grey  |       |  |

### **CE MARKING**

Unique identification code of the product-type: WPSIT0027 FLAGON E membranes are produced by the FLAG Spa factory (SOPREMA group) in Chignolo d'Isola (Italy) and are CE marked no.1085-CPR-008 in accordance with EN 13361:2013.

### CERTIFICATIONS

FLAGON E has obtained the following certifications: **France:** 

• Mentioned in CPP (Technical specifications): Basins, Tanks, Canals, Water towers and similar structures, by DEKRA.

CIVILROCK reserves the right, as technology and know-how progress, to modify without warning the composition and conditions of use of its materials, and subsequently their price. As a result, orders shall only be accepted on the basis of the terms and technical specifications applicable at the time of receipt.

