

POOL SURFACE | MADE IN GERMANY

# elite® Non-Slip

Reinforced waterproofing and non-slip membrane (PVC-P) with superior surface finish for indoor and outdoor swimming pools

# Produced according to EN 15836-2

Plasticized poly(vinyl chloride) (PVC-P) membranes for inground swimming pools Part 2: Reinforced membranes of nominal thickness equal to or greater than 1.5 mm

# Produced according to EN 13967 | CE-certification 1213-CPR-036

Flexible sheets for waterproofing - Plastic and rubber damp proof sheets including plastic and rubber basement tanking sheet | Type of application: Damp proof sheet Type A and Tanking sheet Type T

#### Phthalat-free

Contains a phthalate free plasticizer

# Approval for the use in indoor and outdoor swimming pools

According to KSW recommendations of the German Health Authority (BGA)

# Harmless for health according to EN 71-3

Safety of toys - Part 3: Migration of certain elements (heavy metals)

#### Lowest fume emission during welding process

Tested and verified by Fraunhofer Institute for Material and Beam Technology IWS

Based on pure virgin raw material

# **CHARACTERISTICS**

- Highest non-slip class
- Superior surface finish: prevents the penetration of sun creams, cosmetics and other chemicals that cause stains, especially on the waterline under the effect of the sun, extremely easy to clean
- · Extremely high resistance to ageing
- Extremely resistant against UV rays
- Extremely resistant against chlorinated water
- Resistant to algae and microorganisms
- Resistant to permanent water temperature of max. + 35 °C
- Hot air weldable
- High mechanical strength with polyester fabric
- High dimensional stability
- High flexibility at low temperatures
- REACH conform
- Not resistant to tar, bitumen, oil, fuel and other solvents
- Not resistant in direct contact to other plastics, e.g. polystyrene

# **TECHNICAL DATA**

| PERFORMANCE        | TEST STANDARD   |
|--------------------|---|
| 1.90 mm ± 10 %     | EN 1849-2 1)  |
| 1.20 mm ± 10 %     | EN 1849-2 <sup>2)</sup>   |
| 1.95 ± 0.1 kg/m²   | EN 1849-2   |
| 1.65 m ± 5 mm      | EN 1848-2   |
| 10 m - 0 / + 1.5 % | EN 1848-2   |
| ≤ 10 mm            | EN 1848-2   |
| ≤ 30 mm            | EN 1848-2   |
| ≤ 1 % of mass      | EN ISO 62 Method 1  |
|                    | 1.20 mm $\pm$ 10 %<br>1.95 $\pm$ 0.1 kg/m <sup>2</sup><br>1.65 m $\pm$ 5 mm<br>10 m - 0 / + 1.5 %<br>$\leq$ 10 mm<br>$\leq$ 30 mm |

<sup>1)</sup> Mechanical measurement including the 3D surface profile









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<sup>&</sup>lt;sup>2)</sup> Optical measurement of the effective thickness without the 3D surface profile



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| ESSENTIAL CHARACTERISTICS                              | PERFORMANCE             | TEST STANDARD        |
|--|-------------------------|----------------------|
| Tensile properties:                                    |                         |                      |
| - Maximum tensile strength                             | ≥ 1100 N/50 mm          | EN 12311-2 A         |
| - Elongation   | ≥ 25 %                  | EN 12311-2 A         |
| Delamination resistance at peeling                     | ≥ 80 N/50 mm            | EN 12316-2           |
| Tear resistance (nail shank)                           | ≥ 500 N                 | EN 12310-1           |
| Dimensional stability (80 °C / 6 h)                    | ≤ 1.5 %                 | EN 1107-2            |
| Watertightness (72 h / 400 kPa)                        | Pass                    | EN 1928 B            |
| Durability of watertightness:                          |                         | EN 1296              |
| - against ageing                                       | Pass                    | EN 1928 B            |
| - against chemicals                                    | Pass                    | EN 1847              |
| -  |                         | EN 1928 B            |
| Resistance to impact                                   | ≥ 300 mm                | EN 12691 A           |
| Resistance to static loading (24 h / 20 kg)            | ≥ 20 kg                 | EN 12730 B           |
| Joint strength   | ≥ 1000 N/50mm           | EN 12317-2           |
| Resistance to foldability at low temperature (- 10 °C) | No cracks               | EN 495-5             |
| Visible defects  | Pass                    | EN 1850-2            |
| Non-slip class C / ≥ 24°                               | Pass                    | EN 13451             |
|  |                         | DIN 51097            |
| Resistance to artificial aging (6000 h)                | ≥ 3 according EN 20105- | EN ISO 4892-2        |
| ,  | A02                     | Method A cycle No. 1 |
| Resistance to microorganisms                           | Mass loss ≤ 1 %         | EN ISO 846 D         |
| Resistance to streptoverticillium reticulum            | No stains               | EN ISO 846 C         |
| bacteria ATCC 25607                                    |                         |                      |
| Chlorine resistance                                    | Rating≥5                | EN 15836 Annex C     |
| Resistance to staining agents                          | Rating≥5                | EN 15836 Annex D     |
|  |                         |                      |

## STORAGE AND APPLICATION INSTRUCTIONS

Store the rolls in a horizontal lying position and protected against solar / UV radiation, rain, snow, ice and other weather influences at temperatures between  $\pm$  5 °C and  $\pm$  35 °C. Protect the product also on-site against direct weathering influences.

The processing should take place at temperatures higher than + 10 °C. The waterproofing membrane must be installed in accordance to our Installation Manual for reinforced swimming pool membranes. The welding of all membrane overlaps shall be made by using hot-air welding machines and pressure rollers or automatic heat welding machines.

#### **LEGAL NOTICE**

The customer/installer has to check the applicability of the product for the intended use. He is responsible for the proper application, usage and processing of the product.

We assure the correct quality of our products according to our conditions of sale and delivery. All declarations comply with our recent knowledge.

In behalf of the warranty, the distributor has to secure that his customers are informed about our installation-, careand cleaning-instructions.

## ECOLOGY, HEALTH AND SAFETY (REACH)

This product is an article as defined in article 3 of regulation (EC) No 1907/2006 (REACH). It contains no substances which are intended to be released from the article under normal or reasonably foreseeable conditions of use. A safety data sheet following article 31 of the same regulation is not needed to bring the product to the market, to transport or to use it.

Based on our current knowledge, this product does not contain SVHC (Substances of Very High Concern) from the Candidate List or Annex XIV published by the ECHA (European Chemicals Agency) in concentrations above 0.1% w/w).

# **PRODUCTDATASHEET**





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