

## PRODUCT DATASHEET



### PAROC Pro Mat 100

Stone wool mat.

Thermal insulation in industrial equipments and applications.

PAROC stone wool products are capable of withstanding high temperatures. The binder starts to evaporate when its temperature exceeds approximately 200 °C. The insulating properties remain unchanged, but the compressive stress weakens. The softening temperature of stone wool products is over 1000 °C.

**Certification Number**

0809-CPR-1016 Eurofins Expert Services Ltd, Kivimiehentie 4, FI-02150 Espoo, Finland

**Designation Code**

MW-EN 14303-T2-ST(+)-550-WS1-CL10

**Nominal Density**

100 kg/m<sup>3</sup>

**Package Type**

Plastic Packs on Pallet

| DIMENSIONS          |                     |
|---------------------|---------------------|
| WIDTH X LENGTH      | THICKNESS           |
| 1000 x 8000 mm      | 30 mm               |
| 1000 x 6500 mm      | 40 mm               |
| 1000 x 4500 mm      | 50 mm               |
| 1000 x 4000 mm      | 60 mm               |
| 1000 x 3500 mm      | 70 mm               |
| 1000 x 3500 mm      | 80 mm               |
| 1000 x 3000 mm      | 90 mm               |
| 1000 x 2000 mm      | 100 mm              |
| 1000 x 2000 mm      | 110 mm              |
| 1000 x 2000 mm      | 120 mm              |
| According to EN 822 | According to EN 823 |

  

| PROPERTY  | VALUE  | ACCORDING TO                     |
|---|--------|----------------------------------|
| <b>DIMENSIONAL STABILITY</b>                        |        |                                  |
| Maximum Service Temperature - Dimensional Stability | 550 °C | EN 14303:2009+A1:2013 (EN 14706) |

## Properties

| PROPERTY   | VALUE  | ACCORDING TO                       |
|--|--|------------------------------------|
| <b>FIRE PROPERTIES</b>                                       |  |                                    |
| Reaction to Fire, Euroclass                                  | A1   | EN 14303:2009 (EN 13501-1)         |
| Continuous Glowing Combustion                                | NPD  | EN 14303:2009+A1:2013              |
| <b>THERMAL PROPERTIES</b>                                    |  |                                    |
| Thermal Conductivity in 50 °C, $\lambda_{50}$                | 0,043 W/mK   | EN 14303:2009+A1:2013 (EN 12667)   |
| Thermal Conductivity in 100 °C, $\lambda_{100}$              | 0,047 W/mK   | EN 14303:2009+A1:2013 (EN 12667)   |
| Thermal Conductivity in 150 °C, $\lambda_{150}$              | 0,055 W/mK   | EN 14303:2009+A1:2013 (EN 12667)   |
| Thermal Conductivity in 200 °C, $\lambda_{200}$              | 0,065 W/mK   | EN 14303:2009+A1:2013 (EN 12667)   |
| Thermal Conductivity in 250 °C, $\lambda_{250}$              | 0,078 W/mK   | EN 14303:2009+A1:2013 (EN 12667)   |
| Thermal Conductivity in 300 °C, $\lambda_{300}$              | 0,095 W/mK   | EN 14303:2009+A1:2013 (EN 12667)   |
| Thermal Conductivity in 400 °C, $\lambda_{400}$              | 0,138 W/mK   | EN 14303:2009+A1:2013 (EN 12667)   |
| Thermal Conductivity in 500 °C, $\lambda_{500}$              | 0,196 W/mK   | EN 14303:2009+A1:2013 (EN 12667)   |
| Dimensions and Tolerances                                    | T2   | EN 14303:2009+A1:2013              |
| <b>MOISTURE PROPERTIES</b>                                   |  |                                    |
| Water Absorption, Short Term WS, ( $W_p$ )                   | $\leq 1 \text{ kg/m}^2$  | EN 14303:2009+A1:2013 (EN 1609)    |
| Water Vapour Diffusion Resistance                            | NPD  | EN 14303:2009+A1:2013 (EN 12086)   |
| Chloride Ions, Cl-   | < 10 ppm   | EN 14303:2009+A1:2013 (EN 13468)   |
| <b>SOUND PROPERTIES</b>                                      |  |                                    |
| Sound Absorption   | NPD  | EN 14303:2009+A1:2013 (EN ISO 354) |
| <b>MECHANICAL PROPERTIES</b>                                 |  |                                    |
| Compressive Stress at 10 % deformation CS(10), $\sigma_{10}$ | NPD  | EN 14303:2009+A1:2013 (EN 826)     |
| <b>EMISSIONS</b>   |  |                                    |
| Release of Dangerous Substances                              | NPD  | EN 14303:2009+A1:2013              |
| <b>DURABILITY OF FIRE AND THERMAL PROPERTIES</b>             |  |                                    |
| Durability of Reaction to Fire Against Ageing/Degradation    | No change in reaction to fire properties for mineral wool products. The fire performance of mineral wool does not deteriorate with time. The Euroclass classification of the product is related to the organic content, which cannot increase with time. |                                    |
| Durability of Reaction to Fire Against High Temperature      | The fire performance of mineral wool does not deteriorate with high temperature. The Euroclass classification of the product is related to the organic content, which remains constant or decreases with high temperature.                               |                                    |
| Durability of Thermal Resistance Against Ageing/Degradation  | Thermal conductivity of mineral wool products does not change with time, experience has shown the fibre structure to be stable and the porosity contains no other gases than atmospheric air.  |                                    |



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