AODISI

FIRE TECHNOLOGY

产品资料与销售咨询

PRODUCT DOCUMENTATION & SALES CONTACT

PALUSOL ® SW - Technical Data Sheet-en

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以上为销售联系信息，不替代安全数据表中的应急联系电话。
原始技术内容及制造商、检测机构和证书签发信息见后续资料页。

Sales contact only; emergency contacts in safety data sheets remain applicable.
Original technical, manufacturer and certification details follow.

Technical Product Data Sheet

PALUSOL® SW



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Product description

PALUSOL® SW is an intumescent fire protection board with a multi-layered sandwich design consisting of a PALUSOL® core (hydrated sodium silicate) and HDF top layers. At a temperature of 100 °C, the material expands and forms a thermally insulating foam layer that prevents the passage of flames and smoke. The board is particularly suitable for fire-resistant doors, frames and partition walls and is easy to saw, shape or drill using conventional woodworking machines. The SWR variant with an additional stainless steel grill insert is available for applications with greater mechanical requirements. Thanks to its FSC®-certified HDF surface, PALUSOL SW is not just high-performing, but also environmentally friendly. The boards are available in a variety of thicknesses and help provide a reliable solution for passive fire protection.

Properties

- Intumescent sandwich design
- Reacts early in the event of fire
- High fire resistance
- High-density HDF boards with full FSC® certification
- Can be worked mechanically

Fields of application

- Single or multi-leaf wooden doors with and without glazing
- Sliding doors in fire-resistant buildings
- Multifunctional doors (fire, smoke and noise protection doors)
- Fire protection partitions in buildings
- Frames for fire-resistant door systems
- Used in combination with other fire-proof building elements

Technical data

Composition	Intumescent fire protection boards (PALUSOL®) and high-density fibre boards (HDF)
Material structure	Sandwich design with PALUSOL® core and HDF panels
Start of reaction [°C]	100
Intumescent layer	Heat and pressure-resistant foam
Direction of expansion	Expands two-dimensionally in the direction of the heat source
Surface finish	Smooth HDF surface
Storage	Protect against water, moisture and temperatures continuously above 40 °C. Always store the boards horizontally on a flat surface. Avoid stacking more than five pallets.

Design variants

Item	Width x length (mm)	Thickness (mm)
PALUSOL® SW 4	1100 × 2150	10.1
PALUSOL® SW 20-1	1100 × 2150	7.4
PALUSOL® SW 45-1	1100 × 2150	15.8
PALUSOL® SW 60-1	1100 × 2150	14.4
PALUSOL® SWR 90-1	1100 × 2150	16
PALUSOL® SWR 90-2	1100 × 2150	22.9

Processing information

1. Surface preparation:
   - The cut edges produced during processing must be coated and sufficiently protected against moisture to ensure the durability and protective effect of the material.
2. Installation and fixing:
   - PALUSOL® SW can be joined using standard commercial wood glues and adhesives. When using hot glue, ensure that the PALUSOL® layers between the HDF boards are not heated above 80 °C.
     The product can be processed using standard woodworking machines (for example, by sawing, drilling and milling). Carbide-tipped cutting tools are beneficial to increasing the service life of the tools.
3. Safety notes:
   - Sawing or milling of the PALUSOL® SW produces sodium silicate dust, which should not enter the eyes or respiratory tracts. Therefore, suitable extraction equipment, safety glasses and a dust mask must be used.
     For PALUSOL® SWR (with wire mesh reinforcement), separate extraction systems are recommended due to the potential production of sparks.

Contents of a package/set

Profiles in wooden boxes

Delivery forms

Item	Width x length (mm)	Thickness (mm)	Weight per board (kg)	Boards per pallet
PALUSOL® SW 4	1100 × 2150	10.1	27	25
PALUSOL® SW 20-1	1100 × 2150	7.4	21	45
PALUSOL® SW 45-1	1100 × 2150	15.8	42	23
PALUSOL® SW 60-1	1100 × 2150	14.4	42	23
PALUSOL® SWR 90-1	1100 × 2150	16	49	20
PALUSOL® SWR 90-2	1100 × 2150	22.9	70	14

Note

PALUSOL® is cold-resistant. At low temperatures, it becomes brittle and easy to break but it regains its original flexibility once warmed up.

When subjected to a load, the boards have a tendency to deform (even under their own weight) and more or less adapt to the shape of the support below them.