



Solid Protect

# SPFR100

Transparent fire-retardant impregnation for wood

EuroClass **B-s1, d0** · EN 13501-1:2018 · Certificate ET-0388-24

## PRODUCT DESCRIPTION

SPFR100 is a water-based transparent fire-retardant impregnation for absorbent wood and wood-based materials. The product is intended for use in applications where improved reaction-to-fire performance is required while preserving the natural appearance of the wood.

When applied correctly, wood products treated with SPFR100 can achieve EuroClass B-s1, d0 classification in accordance with EN 13501-1, depending on the wood species, substrate, consumption rate and application conditions.

*The product is generally not suitable for surfaces that are lacquered, painted, oiled or otherwise sealed, unless compatibility has been confirmed in advance with Solid Protect.*

## KEY FEATURES

- |                                      |                                                                                                                                                                                      |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 01 <b>Transparent finish</b>         | Preserves the natural appearance of the wood — no visible fire-retardant paint or lacquer required.                                                                                  |
| 02 <b>Certified system</b>           | Conformity certificate ET-0388-24. Tested at MEKA laboratory. Certificate valid until 13.02.2029.                                                                                    |
| 03 <b>Water-based composition</b>    | Solvent-free and formaldehyde-free. Not classified as hazardous under CLP.                                                                                                           |
| 04 <b>For indoor and outdoor use</b> | Suitable for facades, cladding boards, structural timber, CLT, plywood, log houses and other absorbent wood-based materials.                                                         |
| 05 <b>Application</b>                | Brush, roller or suitable spray system. Typically 2 coats on fine-sawn surfaces and 3 coats on planed surfaces. Total consumption 210–250 ml/m <sup>2</sup> .                        |
| 06 <b>Tinting option</b>             | Can be tinted with selected pigments while retaining a translucent finish. The suitability of the tinted solution depends on the chosen shade, substrate and application conditions. |

## APPLICATIONS

- |                                                         |                                                     |
|---------------------------------------------------------|-----------------------------------------------------|
| — Facades and cladding boards                           | — Plywood and wood-based boards                     |
| — Structural timber: battens, rafters, framing elements | — Log houses and timber structures                  |
| — CLT and multilayer wood panels                        | — Absorbent wood surfaces in indoor and outdoor use |

*In the tested system, spruce wood with a thickness of  $\geq 18$  mm treated with SPFR100 has achieved EuroClass B-s1, d0 classification in accordance with EN 13501-1.*

TECHNICAL DATA

| Parameter                           | Value / description                                                                                                                                          |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product type                        | Water-based transparent fire-retardant impregnation                                                                                                          |
| EuroClass classification            | B-s1, d0 (EN 13501-1:2018)                                                                                                                                   |
| Certificate                         | ET-0388-24 · valid until 13.02.2029                                                                                                                          |
| Test laboratory                     | MEKA (Latvia, NB 2040) · test report K16/2024                                                                                                                |
| Tested wood species                 | Spruce, thickness ≥ 18 mm                                                                                                                                    |
| Consumption                         | 210–250 ml/m² (≥ 240 g/m²) · fine-sawn surface: typically 2 coats · planed surface: usually 3 coats                                                          |
| Application                         | Brush, roller or suitable spray system                                                                                                                       |
| Drying time                         | 24–48 hours (+20 °C, 20–60% RH)                                                                                                                              |
| Fire-retardant properties stabilise | Usually within 5–7 days after application                                                                                                                    |
| Application conditions              | Product temp +15...+25 °C · air temp +15...+50 °C · RH 20–60%                                                                                                |
| Wood moisture content               | 10–18%                                                                                                                                                       |
| pH                                  | 6.6–7.2 (20 °C)                                                                                                                                              |
| Density                             | 1.10–1.15 g/cm³                                                                                                                                              |
| Viscosity                           | 12.75 mPa·s (20 °C)                                                                                                                                          |
| Storage                             | +5...+30 °C · protected from direct sunlight                                                                                                                 |
| Shelf life                          | 24 months in unopened original packaging when stored properly                                                                                                |
| Waste disposal                      | Treated wood: non-hazardous wood waste where permitted by local regulations. Empty and dry packaging to be disposed of in accordance with local regulations. |
| Transport                           | Not classified as dangerous goods (ADR/RID, IMDG, IATA)                                                                                                      |

CERTIFICATES AND TEST DOCUMENTS

|                                                                           |                                                          |                                                                         |                                                                        |
|---------------------------------------------------------------------------|----------------------------------------------------------|-------------------------------------------------------------------------|------------------------------------------------------------------------|
| <b>Conformity certificate</b><br>ET-0388-24<br>Inspecta Estonia OÜ (Kiwa) | <b>Test report</b><br>K16/2024<br>MEKA, Latvia (NB 2040) | <b>Standard</b><br>EN 13501-1:2018<br>Reaction to fire — classification | <b>Technical specification</b><br>TS-ET-0388<br>Valid until 13.02.2029 |
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CONTACT

Contact and orders

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Documents

- Technical data sheet (TDS)
  - Safety data sheet (SDS)
  - Maintenance guide
  - Conformity certificate ET-0388-24
- [solidprotect.eu/documents](https://solidprotect.eu/documents)

The information provided is based on laboratory studies and practical tests. All data is informational and does not constitute a contractual obligation. Fire class and performance depend on the substrate, wood species, consumption rate, application and conditions of use. See current TDS and SDS at solidprotect.eu.