

Product description

SPFR100 is a transparent, water-based fire-retardant impregnation for wood. The product penetrates the wood and does not form a surface film, so the wood grain remains visible. SPFR100 is available clear and tinted.

Reaction to fire classification

B-s1,d0 according to EN 13501-1:2018. Classification report K16/2024. [Certificate ET-0388-24](#) (Inspecta Estonia OÜ / Kiwa), valid until 13.02.2029. The classification applies to the configuration described in [Annex Z](#) of the certificate.

Field of application

Absorbent wood materials indoors and outdoors: façade and cladding boards, structural timber, plywood, multi-layer wood panels, CLT and log buildings.

Composition and indoor air

Water-based, solvent-free, formaldehyde-free and halogen-free, and contains no volatile organic compounds (VOC). Indoor emission class M1 (certificate 5096, RTS, valid until 13.05.2029). The product is not classified as hazardous under the CLP Regulation, see the safety data sheet (SDS).

Technical data

Appearance	transparent liquid, can be tinted
Solvent	water
Density	1.10–1.15 g/cm ³
Consumption, certified	total at least 240 g/m ² (approx. 210 ml/m ² at a density of 1.15 g/cm ³), at least 2 coats
Consumption, in practice	total 210–250 ml/m ² , depending on the wood, surface and application method; total consumption must not fall below 240 g/m ²
Interval between coats	at least 60 minutes
Drying time	ready for installation and transport within 24–48 hours (+20 °C, relative humidity 20–60 %)
Packaging	1 l, 5 l, 10 l, 25 l and IBC 300–1000 l
Shelf life	12 months in the unopened original packaging from the production date marked on the package
Storage	+5...+30 °C, protected from frost and direct sunlight

Substrate

The surface must be clean, dry and absorbent. Wood moisture content 10–18 %.

Pore-sealing layers (oil, lacquer, paint) prevent absorption and must be removed before treatment. On previously treated surfaces, check the absorbency and the compatibility of the previous treatment with SPFR100 beforehand.

Application conditions

Product temperature +15...+25 °C, air temperature +15...+50 °C, relative humidity 20-60 %.
Protect freshly treated wood from rain and moisture until the surface is completely dry.

Application

Shake or stir before use. Apply by brush, roller, spray or impregnation. Treat all sides, including ends and cut surfaces.

At least two coats, with at least 60 minutes between coats. The exact interval depends on the wood, temperature and humidity. If the package has been opened repeatedly, assess the suitability of its contents before use.

Tinted SPFR100

Standard tones or a custom tone to RAL or NCS. The tone is confirmed on a sample, as the final result depends on the wood species, the surface and the amount applied. Under strong UV radiation the tone may fade faster.

Outdoor exposure and maintenance

Inspect treated surfaces at least once a year. If the inspection shows a need, apply a maintenance coat of 120–140 ml/m² to a clean, dry surface. Re-treat mechanically damaged and cut areas with SPFR100.

In damp locations (north-facing sides, near the ground) protection against mould may be needed. Agree the suitability of any additional product with Solid Protect, as additional layers may affect the fire-retardant properties. Further details: [SPFR100 maintenance guide](#).

Cleaning of equipment

Warm water, with pH-neutral soap if needed.

Waste disposal

Do not allow the product to enter drains or soil. Dispose of waste in accordance with local regulations. Treated wood is handled as wood waste in accordance with local regulations.

Safety and support

Follow the safety data sheet (SDS). Current documents: solidprotect.eu/en/documents.
Technical support: support@solidprotect.eu.

Manufacturer

Solid Protect OÜ, registry code 16851651, Vabaduse pst 174B, 10917 Tallinn, Estonia.
Production: Tännassilma tee, Harju County, Estonia.

The data are based on tests and practical experience. The user is responsible for checking the suitability of the product for the specific project. This data sheet is not a guarantee and does not replace the fire safety requirements of the project. The latest version of the data sheet applies.