

FLAME-EX

Fire-retardant coating engineered for closed-cell polyurethane spray foam and OSB wood

EI20 Fire-retardant protection for closed-cell PU foam • EN 13501 certified



 Closed-cell PU foam and OSB wood	 Minimum consumption on PU foam: 1 kg/m ²	 Application: airless spray, roller or brush
 Application temperature: 5–30°C	 Water-based, solvent-free formula	 Fireclass A, S1, D0 (class A substrates); B, S2, D0 (on closed-cell PU foam - Heatlok)
 Fire resistance up to E20 / EI20 / EW20 (EN 13501-2) (closed-cell PU foam)	 For interior use only; not suitable for exterior/outdoor use	 Low VOC — EC1 Plus certified



Fire-retardant protection for closed-cell polyurethane foam, OSB wood — limits ignition and delays flame spread



**WATER-BASED FORMULA
SOLVENT-FREE**



**FIRE-RETARDANT PROTECTION
FOR PU FOAM & WOOD**



**EN13501 CERTIFIED
CLASS A / CLASS B**

1. Product description

FLAME-EX is a water-based, solvent-free, fire-retardant coating designed to improve the fire performance of treated substrates. Once fully cured and applied at the specified coverage rate, it helps limit ignition and significantly delays flame spread. By protecting the underlying material from direct exposure to fire, FLAME-EX may also reduce smoke development and the release of combustion gases from insulation materials, plastics and similar substrates. FLAME-EX is certified for use on closed-cell polyurethane foam and wood as part of specified, tested systems, and may also be applied to steel and mineral substrates, provided that substrate compatibility, adhesion and the required fire-performance classification have been verified for the intended application.

2. Typical applications

- closed-cell polyurethane spray foam roof and wall insulation
- OSB wood substrates and load-bearing timber panels
- steel structures and mineral substrates (subject to verification)
- for interior use only — not suitable for exterior or outdoor application

3. Key benefits

- limits ignition and significantly delays flame spread once fully cured
- reduces smoke development and release of combustion gases from insulation, plastics and similar substrates
- certified fireclass A, S1, D0 on class A substrates and B, S2, D0 on closed-cell PU foam (EN 13501) (Heatlok foam by Huntsman)
- water-based, solvent-free formula; EC1 Plus certified (low VOC)
- applied by airless spray, roller or brush — flexible for site conditions

4. Surface preparation

- remove all dust, loose or friable material, grease, dirt and other surface contaminants
- apply FLAME-EX only to a sound, closed and continuous surface; fill holes, gaps and joints with a suitable product depending on the substrate
- dry mineral substrates must be slightly dampened before application; avoid standing water
- apply PRIMER 52FR to polyurethane foam, porous substrates and old or weathered surfaces — concrete, most common brick types, steel and most common wood substrates generally do not require a primer; always verify substrate compatibility before application

5. Application

- stir FLAME-EX thoroughly with a drill-mounted paddle mixer until a homogeneous consistency is obtained; do not add water, solvents or other additives
- substrate and ambient temperature during application and drying must be between 5°C and 30°C
- apply by airless spray, roller or brush in one or two coats, at a total consumption of minimum 1 kg/m² (PU foam, OSB wood); verify complete coverage
- under normal conditions, drying time ranges from approximately 4 to 24 hours — longer at low temperatures, high relative humidity or high film thickness
- clean tools and equipment with water immediately after use

6. Finish and protection

- FLAME-EX is intended for interior use only and is not suitable for exterior or outdoor exposure
- on wooden substrates, an additional finishing coat may be required to prevent staining or discolouration from migrating through the coating
- contact Hevadex before applying any other type of finish or topcoat over FLAME-EX

7. Characteristics / practical information

Colour	White/orange; other colours on request
Consumption	Min. 1 kg/m²
Density (EN ISO 2811-1)	1.35 kg/litre (± 0.1)
Vapour transmission (EN ISO 7783)	Sd < 0.1
pH	9
Solids (EN ISO 3251)	70% (± 2%)
Adhesion	> 0.5 MPa
VOC	EC1 Plus — Pass
Fireclass on class A substrate (EN 13501-1)	A, S1, D0
Fireclass on HEATLOK PU foam (Huntsman) (EN 13501)	B, S2, D0
Fire resistance, load-bearing walls, OSB wood (EN 1365-1)	25 min
Fire resistance, non-load-bearing walls, PU closed-cell foam (EN 13501-2)	E20, EI20, EW20

Packaging
10 Kg pails. Other packaging on demand.

Storage
5–20°C; stored dry, out of direct sunlight; conservation 6 months from date of production, in original unopened packaging

Safety
consult the SDS safety data sheet prior to applying FLAME-EX



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