

SK – Certificate of Conformity

The undersigned representative of the manufacturer:

Manufacturer: Jiří Vyřimec MOVYCHEM
Švábska 1433/2
951 31 MOČENOK
Slovak republic

Production address: MOVYCHEM/UNICENTRUMPLUS s.r.o.
Fatra premises
768 11 Chropyně
Czech republic

hereby declares that the product

Fire-retardant coating system for wood

which is composed of the water-proof coating agent AQUAIZOL, the fire-retardant foam sealant PYROGUMA and the fire-retardant coating agent ADINA

complies with the provisions of the Act No. 90/1998 Coll. on construction products as amended by later regulations provided that they were used according to the instruction manual and the following legal regulations and standards apply to the products and their manufacturing:

- Technological attestation No. TO-12/0100 Fire-retardant coating system for wood, issued by TSÚS, n. o., Attestation site OM 04, Studená 3, Bratislava, Slovak republic, September 14, 2012.

Within the scope of initial type tests, the system was tested for the following properties:

Fire-retardant coating system for wood

| Property | Declared value or class | Test report number and reference to testing laboratory |
|-----------------|-------------------------|--|
| Fire resistance | REI 30 | [16] Test report No. FIRES-FR-113-12-AUNS [17] Test report No. FIRES-FR-103-12-AUNS |

ADINA

| Property | Declared value or class | Test report number and reference to testing laboratory |
|-----------------|-------------------------|---|
| Fire response | Class B-s2, d0T | [3] Test report No. FIRES-FR-071-12-AUNS [4] Test report No. FIRES-FR-072-12-AUNS [5] Test report No. FIRES-FR-075-12-AUNS [6] Test report No. FIRES-FR-076-12-AUNS [8] Fire response classification FIRES-CR-119-12- AUPS |
| Fire resistance | EI 45 | [9] Test report No. VZL-49/11 [10] Test report No. VZL-05/12/04 [11] Test report No. VZL-05/12/05 |

| | | |
|--|-------------------|---------------------------------|
| Release of pollutants into the environment | safety data sheet | - |
| Adhesion strength to ground - wood | min. 0.25 MPa | [20] Test report No. 060-034276 |

PYROGUMA

| Property | Declared value or class | Test report number and reference to testing laboratory |
|--|-------------------------|--|
| Fire response | Class B-s2, d0 | [1] Test report No. FIRES-FR-070-12-AUNS [2] Test report No. FIRES-FR-074-12-AUNS [7] Fire response classification FIRES-CR-120-12-AUPS |
| Fire resistance | EI 15 to EI 45 | [12] Test report No. VZL-05/12/06 [13] Test report No. VZL-05/12/07 [14] Test report No. VZL-05/12/08 [15] Test report No. VZL-05/12/09 |
| Release of pollutants into the environment | safety data sheet | - |
| Volume variation | max. 20% | [22] Test report No. 250/2002 |
| Weight variation | max. 20% | [22] Test report No. 250/2002 |

AQUAIZOL

| Property | Declared value or class | Test report number and reference to testing laboratory |
|---|------------------------------------|--|
| Release of pollutants into the environment | safety data sheet | - |
| Coating water impermeability | 0.0 l/m ² in 30 minutes | [21] Test report No. A 020-019005 |
| Stress-strain properties - tensile strength - relative elongation | ≥ 0.6 MPa ≥ 3.0% | [21] Test report No. A 020-019005 |
| Absorption capacity (24 h) | ≤ 10% | [21] Test report No. A 020-019005 |

Product identification features

| Property | Declared value or class | Test report number and reference to testing laboratory |
|-----------------------------|--|--|
| AQUAIZOL (mixture) | | |
| Density | 1.5 g/cm ³ ± 0.1 g/cm ³ | [24] Test report No. 2560/12 |
| Non-volatile agents content | 66% ± 5% | [24] Test report No. 2560/12 |
| PYROGUMA | | |
| Density | 1.3 g/cm ³ ± 0.1 g/cm ³ | [24] Test report No. 2560/12 |
| Non-volatile agents content | 80% ± 5% | [24] Test report No. 2560/12 |
| Thermogravimetry | variance of max. 5% weight loss against the reference curve | [25] Test report No. 0279/2012 [26] Test report |
| Infrared spectroscopy | dispersion < 4 cm ⁻¹ against the reference spectrum in the wavenumber range (4 000 to 600) cm ⁻¹ | [25] Test report No. 0279/2012 [26] Test report |
| ADINA | | |
| Density | 1.3 g/cm ³ ± 0.1 g/cm ³ | [23] Test report No. 2526/12 |
| Non-volatile agents content | 67% ± 5% | [23] Test report No. 2526/12 |
| Thermogravimetry | variance of max. 5% weight loss against the reference curve | [25] Test report No. 0279/2012 [26] Test report |
| Infrared spectroscopy | dispersion < 4 cm ⁻¹ against the reference spectrum in the wavenumber range (4 000 to 600) cm ⁻¹ | [25] Test report No. 0279/2012 [26] Test report |

Product description and application method in a construction

Fire-retardant coating system for wood is composed of the water-proof coating agent AQUAIZOL, the fire-retardant foam sealant PYROGUMA and the fire-retardant coating agent ADINA.

The fire-retardant coating system for wood is intended for indoor coating of wood-based materials, chipboards (DTD), fibre boards (DVD) and flake boards (OSB) which are parts of composite boards used for timber constructions. In the burning process, fire-retardant coating system elements form a flame-resistant foam layer which insulates the base material and extends its fire resistance.

AQUAIZOL is intended for water-proof coatings of internal surfaces in cavities of composite boards.

PYROGUMA is a flame-resistant sealant intended for sealing joints, transmissions and edges of wood-based materials. To attain an efficient seal against flame penetration, the joint width between construction wood parts or wood shall be in the range min. 1 mm to max. 7 mm. The joint shall be filled with the sealant up to the minimum depth 9 mm.

ADINA is a fire-retardant ground coating agent which provides also a decorative finish.

Fire resistance classification applies only to the compositions identical to those specified in the Appendix 1 TO-12/0100.

The fire-retardant coating system is not intended for the surface treatment of the items used for storage and transport of food, feed products and drinking water.

Names and addresses of laboratories which performed the tests:

- [1] to [8], [16] to [18] FIRES, s. r. o., Osloboditeľov 282, 059 35 Batizovce, Slovak republic
- [9] to [15], [19] Výzkumný a vývojový ústav dřevařský, Praha, s. p. (Timber Institute, Praha, S.E.),
Product testing laboratory Břežnice, Borská 471, 262 72 Břežnice, Czech republic
- [20] Technický a zkušební ústav stavební Praha, s. p. (Building Testing and Research Institute, Praha, S.E.), branch office Brno, Hněvkovského 7, 617 00 Brno-Komárov, Czech republic
- [21] Technický a zkušební ústav stavební Praha, s. p. (Building Testing and Research Institute, Praha, S.E.), branch office České Budějovice, Nemanická 441, 370 10 České Budějovice, Czech republic
- [22] Technický a skúšobný ústav stavebný, n. o. (Building Testing and Research Institute, S.E.), accredited testing laboratory at the Tatranská Štrba branch, Štefánikova 24, 059 41 Tatranská Štrba, Slovak republic
- [23] - [24] VUP, a. s., Nábřežná 4, 971 04 Prievidza, Slovak republic
- [25] VÚSAPL, a. s., Novozámocká 179, 949 05 Nitra, Slovak republic
- [26] Slovak University of Technology, Faculty of Chemical and Food technology, Institute of Physical Chemistry and Chemical Physics
- [27] Permission to use protocols issued for the company MOVYCHEM, Močenok, by the manufacturer PYROCHEM, s.r.o., Bratislava, Slovak republic
- [28] Permission to use protocols issued for the company Moles Technology, a. s., Bratislava, by the manufacturer PYROCHEM, s.r.o., Bratislava, Slovak republic

Name: Jiří Vylimec

Function: Manager

Date: October 4, 2012