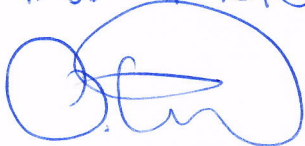


HOLZ PROF LTD

TECHNICAL DESCRIPTION OF PRODUCT

Holz Prof ES- 1

Version 1

18.01.2010




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APPROVED BY: Gennadi Nikolajev Board Member on 01.08.2009		

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1. Purpose:

The purpose involves meeting technical parameters of product, technical requirements of system of conformity, description of product, recommendations on application, packing, requirements for labour and health protection, method of control, transportation and storage.

2. Technical Description comprises:

- 2.1 Field of application
- 2.2 System of conformity
- 2.3 Regulating documents and field of application
- 2.4 Properties of product
- 2.5 Control of product conformity
- 2.6 Conditions of application
- 2.7 Checking quality of impregnation
- 2.8 Safety requirements
- 2.9 Packing
- 2.10 Storage and transportation



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2.1 Field of application

Holz Prof is intended as complex impregnation agent and fire retardant for protection of wood.

Conclusion as to the use of the product: Fire-retarding Class B-s 1-d0, where

B – products, involving of which into fire is rather restricted;

s1 – smoke formation presence is notably small;

d0 – burning particles are not observed.

2.2 System of conformity

The system of conformity of the product in accordance with the requirements involves the third party.

The accredited laboratories have been involved to determine the product properties and issue the conclusion as to application of the product.

2.3 Regulating documents and the field of application

Each wooden item impregnated with Holz Prof meets the quality of Fire-retarding Class B-s 1-d0

Applied Standards of fire protection: EN 13823&2007 and EN ISO 11925-2

Classification Standard: EN 13501 – 1:2007.

Nordtest Method NT FIRE 053 – for exterior conditions of application

NT Build 504 – hygroscopical / moisture-retentive test

Holz Prof is intended for fire protection of wooden parts in private houses, production buildings, agricultural premises and communal houses to improve fire-retarding class of protection, in accordance with the Estonian Government Ruling No. 315 Dated: 27.10.2004 and EC Directive 89/106/EEC – Construction products.

Holz Prof as an agent is intended for protection of wood against ignition and burning.

Holz Prof is suitable for treatment of wood, both hardwood and spruce, for interior and exterior conditions.

Holz Prof shall not be used for surfaces covered with varnish, paint, boiled oil or other hygroscopical substances.

2.4 Properties of the product

2.4.1 Hazardous ingredients

Not Available

2.4.2 Non-hazardous ingredients

<i>Name</i>	<i>CAS number</i>	<i>EC number</i>	<i>Content</i>	<i>Classification</i>
Ferric hydrophosphate	10045-86-0	233-149-7	under 30%	-

2.4.3 Physical and chemical properties

state:	liquid
colour:	light-brown
odour:	without odour
relative density:	1.1
pH	2.1
solubility in water:	100%



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Holz Prof is a colourless agent; it chemically binds wood, which modifies wood.
It makes wood hardly inflammable, with poor burning properties.
It improves indices of strength of wood treated with Holz Prof.
It does have any impact on glueing properties of wood, or later painting.
It preserves texture of wood, and it does not prevent from air access and circulation.
It is fire-retardant, explosion-proof and safe.
Holz Prof is not toxic and cancer causing agent.

2.5 Control of conformity of the product

The instruction is approved for the product. When carrying out the production process, an operative shall be guided by the composition given in the approved instruction. The production process as given by Holz Prof Ltd meets Instruction requirements J-1

To ensure conformity of the applied product, the following methods are used for the control:

- visual inspection in terms of colour and consistency,
- control of density,
- control of acidity.

2.6 Conditions of application

The product shall be applied upon surfaces which have been cleaned of contaminations, dust, bark, etc. by brush, roller or under vacuum conditions. Moisture of wood to be treated shall not exceed 18% of its mass. Air temperature shall not be lower +5°C (with humidity not higher than 75%).

Temperature of the agent (Holz Prof) shall be in the range from + 25°C to +30°C. If so required, the agent may be heated up to the required temperature. The above mentioned temperature of the agent ensures proper impregnation of the agent into wood.

-the agent shall be applied by brush and/or roller upon surfaces of wooden material. Two to three (2 – 3) coatings shall be applied, with 40 to 60-minute intervals. Thus, the cumulative consumption comes to 300g/m² (270 ml/ m²).

Depth of impregnation shall come to 2.5 – 4.5 mm.

Each freshly applied coating shall be dried up at air temperature in the range from + 12°C to +45°C. When drying up, the air humidity shall not exceed 75%.

-when impregnating process is carried out in a bath and vacuum, the consumption comes to 300g/m² (270 ml/ m²), which ensures the depth of impregnation of 2.5 to 4.5 mm.

After expiry of 72 hours, impregnated and dried up wood can be painted or coated with other decorative protective means.

The complete binding of the agent with wood takes about seven (7) days.

After impregnation, wood surface are not to be mechanically treated.

Those surfaces, which have been damaged during transportation or handling, shall be repeatedly impregnated.

Do not impregnate any wood covered by ice! Do not mix the agent with other substances!

Before applying, the agent shall be properly agitated!

Any sediment of the agent does not influence the quality of the product.

For further information, please contact the manufacturer.



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2.7 Control of impregnation quality

When performing an impregnation job, the control shall be carried out as to physical appearance of impregnation and depth of impregnation. This is to be done by means of a microscope and callipers, as well as acid indicator. The impregnated surface shall be uniform and without any stains.

For larger surface areas, it is recommended to check the quality of impregnation by batches. A batch shall comprise wood items with impregnated surfaces up to 200 m².

2.8 Safety requirements

Keep the agent in locked places inaccessible to children.

Put on suitable protective clothes, gloves and goggles to protect eyes and face.

If the agent gets into eyes, rinse the eyes with abundant quantity of water.

In the event of feeling sick, ask for medical advice and show the instruction of the agent.

The impregnation process shall be performed in properly ventilated places. Disposal of wasted agent may be together with other domestic waste.

2.9 Packing

The product is packed in the special packing. The packing has the attached label, with the marking, name of the product, quantity, bar-code, date of manufacturing (date-month-year), the manufacturer's data (name, address, contact information), and signs of hazards. The label also has data on application, and number of manufactured batch.

2.10 Storage and transportation

The fire-retarding agent HOLZ PROF for wood protection shall be stored, kept and transported in hermetically sealed packing, separately from food products. Storage of the agent shall be at air temperature not lower than -5°C. Time of storage is 36 months.

