

## TECHNICAL DATA SHEET

# ISONEM ANTI FIRE WOOD VARNISH

(Fire Retardant Wood Varnish)

### Product Description

ISONEM Antifire Wood Varnish is a fire-resistant, water-based, intumescent and transparent thin-film coating used for the protection of the wooden surfaces in the interior against fire. The Antifire Wood Varnish applied surfaces must be protected by ISONEM LIQUID GLASS liquid glass application from water and humidity. Thanks to its transparent structure, when applied, it provides a surface with a highly fire-retardant performance without changing the color of the surface. If a different color is desired, a coloring agent may be applied to the surface before the application. It is environmentally friendly. It does not contain VOC and solvent, it is extremely simple to apply.

- Water-based, environmentally friendly.
- Prevents spreading of the flame on the wooden surface.
- With its superior fire-retardant performance, prevents the wood from being ignited immediately.
- Slows down the speed of fire progress.
- Does not emit toxic fumes.
- Provides additional safety against fire in closed and risky places where people are gathered.
- Easy to using. It can be applied with a spray/brush/roll.

### Usage Areas

- Raw wood surfaces, wooden doors
- Interior furniture,
- Historical monuments, finished wooden buildings,
- Hotels, theaters, entertainment venues, computer rooms, and other public facilities

### Technical Specifications

|                                   |                 |
|-----------------------------------|-----------------|
| Density A comp. (25°C, g/mL)      | : 1,25 ± 0,10   |
| Viscosity A comp. (25°C, mPa.s)   | : 500 - 1500    |
| Density B comp. (25°C, g/mL)      | : 1,45 ± 0,10   |
| Viscosity B comp. (25°C, mPa.s)   | : 2000 - 3000   |
| Density A+B comp. (25°C, g/mL)    | : 1,27 ± 0,10   |
| Viscosity A+B comp. (25°C, mPa.s) | : 1500 - 2500   |
| Touch-free Drying                 | : 18 - 24 hours |
| Through-dry time                  | : 7 days        |
| Pot life (23°C)                   | : 30 minutes    |
| Solvent                           | : Water         |
| Class of fire reaction            | : B S1 d0       |
| Color                             | : Transparent   |

## Application Procedure

**Surface preparation:** Application surfaces should be cleaned from all kinds of oil, dirt, dust and surface wastes and must be completely dry and clean.

**Preparation of mixture:** ISONEM ANTIFIRE WOOD VARNISH is supplied in ready-to-use kits according to the mixing ratio. Prepare an amount of mixture to be applied by considering the mixture life. Before starting to mix, make sure that temperatures of the materials are between +15 and +25°C. Stir component A with a 300 – 400 rpm mechanical mixer for 3-4 minutes without dragging air in it. Then, pour the entire component B into component A and make sure that no material is left in component B. Stir component A and B at least for 3 min. until a homogenous mixture is obtained and consume the prepared mixture within 40-45 minutes

**Application method:** ISONEM ANTI FIRE WOOD VARNISH should be applied by brush, roller or spray to obtain the desired thickness, it should be applied as 2 or 3 coats, wait for 18 - 24 hours for each coat. ISONEM Antifire Wood Varnish is not water and moisture resistant. Therefore, after the product fully dry, the following day should be applied as a solvent-based ISONEM Liquid Glass protective topcoat in 2 coats and waiting for a minimum of 4 hours between coats.

## Application Conditions / Limitations

|   |  |
|---|--|
| <b><u>Application</u></b>                   | : In perpendicular to each layers        |
| <b><u>Surface humidity</u></b>              | : Dry surface                            |
| <b><u>Primer usage</u></b>                  | : X                                      |
| <b><u>Primer consumption</u></b>            | : X                                      |
| <b><u>Product usage</u></b>                 | : 2 layers                               |
| <b><u>Product consumption</u></b>           | : 0,300 – 0,500 kg/m <sup>2</sup>        |
| <b><u>Paintable (Coverage) Area</u></b>     | : 3 - 5 m <sup>2</sup> /bucket           |
| <b><u>Between two coats</u></b>             | : 18 - 24 hours                          |
| <b><u>Recommended application tools</u></b> | : Roller (synthetic epoxy), brush, spray |
| <b><u>Application temperature (°C)</u></b>  | : 15 - 20 °C                             |

**Things to consider during and after the application:** The application surface must be clean and free from all impurities like dirt, oil, and mud.

**Other ISONEM products recommended:** After the product fully dry, the following day should be applied as a solvent-based ISONEM Liquid Glass protective topcoat.

## IMPORTANT

The surface should be protected from rain, water, mechanical loads and impacts for 72 hours during and after the application.

## Packaging & Storage

|                                 |  |
|---------------------------------|--|
| <b>Packaging</b>                | : 1,5 kg set, Component A 1 kg + Component B 0.5 kg can hardener                         |
| <b>Storage temperature (°C)</b> | : 5 - 35 °C  |
| <b>Shelf life</b>               | : 24 months from date of production if stored in original, unopened, undamaged packages. |
| <b>Storage condition</b>        | : Store tightly closed in a dry and cool place.  |

## Cleaning of Tools

Clean all tools and application equipment with clean water immediately after use.

## Health and Safety Information

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.



### Statement of Responsibility

The technical information and application advice given in this ISONEM Paint & Insulation Technologies publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

