DESCRIPTION

**AITHON PV33** is a transparent, water borne intumescent varnish for providing fire resistance to internal timber. It is easy to use and quick drying.

It must be protected using AITHON F3A Finish coat.

**AITHON F3A**, is a low sheen, non-yellowing waterborne clear top seal for PV33.

BEFORE STARTING APPLICATION

- Check the ambient temperature and humidity to ensure that they are within the recommended limits throughout the application time.
- Check timber humidity.
- Ensure that the timber surface is free from dust, wax, oil, or other water-repellent products which may affect AITHON PV33 adhesion. In case of doubt we recommend the preparation of test specimens, with and without a certain degree of surface preparation, in order to choose the best procedure.
- Stir thoroughly before use.
- Ensure appropriate PPE is available (gloves, googles and face mask) in accordance with the health and safety data sheet.

SUBSTRATE PREPARATION

AITHON PV33 is water borne, and its adhesion is related to the natural porosity of timber. If the timber has already been treated with a varnish, with oil or wax products and the timber porosity has been reduced, the adhesion of AITHON PV33 can be significantly affected.

It is often very difficult to eliminate completely the existing products from the timber surface, and a proper sandblasting is often not possible due to ambient restrictions; but at least the entire surface needs to be carefully cleaned using a 150 or 180 grade sand paper, if timber is already treated. Otherwise the adhesion in the long term may be affected, even if it seems good at the time of application.

AITHON TB15 is a water based clear primer suitable for application over existing stained timber or timbers with open grains. It provides a tannin blocking effect, reduces absorption of softwoods and improves adhesion of the Aithon PV33. An additional benefit of TB15 is that it protects timber from marking during handling or assembly. Refer to the Aithon TB15 data sheet for application details.

If you have any doubt regarding the compatibility of AITHON PV33 with your timber substrate, please advise a Permax representative.
SITE REQUIREMENTS

Aithon PV33 should not be applied where ambient humidity exceeds 70%. It is important not to exceed the ambient humidity as this will affect the drying of the product and it will remain sticky.

Note: If Aithon F3A topseal is applied onto uncured PV33 then this can cause long term durability problems and may result in local delamination.

Apply AITHON PV33 when ambient temperature is between 5°C and 30°C; it is important that the temperature remains above 5°C throughout the drying process.

The timber humidity at the time of application should be below 12%. A higher timber humidity does not affect AITHON PV33 adhesion, but the varnish drying process will slow down, and the film may remain sticky until timber excess of humidity has been released to the ambient air. In this case we recommend heating the site, and provide once in a while ventilation to help both timber and the varnish to dry.

APPLICATION

AITHON PV33 should be applied using spray equipment and the best results are achieved using double-orifice nozzles, such as the RAC X LP fine finish switch tip (314 orifice). Stir thoroughly before use.

For application at low temperature (5°C – 10°C) it may be convenient to heat AITHON PV33 up to 40 – 50°C. For airless spray application at low temperature an electric heating unit can be inserted between the pump and the gun. Please contact your airless pump supplier for more information on these heating units.

The required quantity of AITHON PV33/F3A for fire classification is the following:

<table>
<thead>
<tr>
<th>Product</th>
<th>Class</th>
<th>g/m²</th>
<th>D.F.T (microns)</th>
<th>W.F.T (microns)</th>
<th>No. of coats (indicative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AITHON PV33</td>
<td>FRL 15, FRL 30, FRL 45, FRL 60</td>
<td>300 - 1150</td>
<td>Up to 250</td>
<td>250 / coat</td>
<td>Dependent on g/m² required.</td>
</tr>
<tr>
<td>AITHON F3A</td>
<td></td>
<td>50</td>
<td>14</td>
<td>50</td>
<td>1</td>
</tr>
</tbody>
</table>

*Required thickness of PV33 needs to be determine based on WarringtonFire Assessment Report FAS190031. Please contact Permax for further details.

THINNER

AITHON PV33 is supplied as a gel product. It can be spray applied as it is or thinned with 5% water. Brush or roller application requires a 10% to 20% thinning with water.

AITHON F3A may be used as it is, or thinned with water.

DRYING

AITHON PV33 (base coat): 300 gr/m2 can be applied in one or two coats. Applying one coat per day is correct, but with relative humidity below 65% and temperature above 20°C it is possible to apply two coats per day.

AITHON F3A (finish coat) can be applied the day after the last coat of AITHON PV33.

STORAGE

Storage and transport at min. 5°C and max 30°C. Unopened packaging has 18-month shelf life. Opened packaging must be sealed carefully.
MAINTENANCE

Once the treatment has been applied including protective top seal, it will last for the useful life of the substrate. If minor surface abrasion/wear has occurred to the F3A top seal then repair can be carried out by spray, brush or roller application. If major damage has occurred then please consult a Permax representative. **Note:** Do not attempt to brush or roll F3A top seal over PV33 as it will cause surface deformation (dragging) due to the water content of the F3A partially dissolving the PV33.

HEALTH and SAFETY

During application avoid contact with open wounds, eyes and mouth. Eyes and skin should be rinsed immediately with clean water. Safety goggles and gloves should be worn when handling and applying the material. Adequate ventilation and appropriate mask required when spraying. More detailed information can be found in the Material Safety Data Sheet.

All data sheet details are recommended values obtained from our technical tests and experience in the use of this product. This product may not be used for any purposes other than those listed or recommended herein without our prior consent issued in writing. Doing so voids all legal claims for damages incurred against Aithon Ricerche International. Owing to the differing materials, substrates, and working conditions, no warranty for a final working result nor any liability, irrespectively of the legal recourse, may be construed from these instructions nor from any oral advice unless the claimed damage arises from intent or gross negligence on our part. This sheet replaces all prior data sheets.