Technical Data Sheet
Tanalith® E 3475

Wood Protection

Tanalith E
WOOD PRESERVATIVE

Product Description

Tanalith E 3475 is a water based wood preservative which is applied industrially by impregnation under controlled conditions using a vacuum-pressure autoclave.

Tanalith E 3475 is based on a synergy of copper and active organic ingredients giving it both insecticidal and fungicidal properties.

Tanalith E 3475 is supplied as a blue liquid concentrate, to be diluted and used for the long term protection of timber both in and out of ground contact.

Suitable for Use Classes 1-2-3-4.

Tanalith E 3475 is effective against fungal decay and agents against all wood boring insects, including termites.

Efficacy

The thresholds of insecticidal and fungicidal efficacy were derived by performing accelerated aging tests following:

EN 84 : Leachate Test
EN 73 : Evaporative Test

Preventative Insecticide

This product is effective against all insects of dry wood and to wood-boring larvae (beetles, lyctus, beetles) and against termites. The threshold for preventive efficacy of the product was determined by the following test methods:

EN 47 : Beetles (this test is valid for all other wood-boring insects)
EN 117 : Termites

Both standards are specific to the control effectiveness of the products used by vacuum pressure impregnation.

Fungicide

This product is particularly effective against fungal decay agents. The threshold of efficacy was determined by the following test methods:

EN 113 :	Basidiomycetes fungi
ENV 807 :	Soft rot fungi and other soil inhabiting micororganisms
EN 252 :	Nordic Test Fields

Concentrate Product Characteristics

Composition of active materials in delivered product

Copper, granulated	9.0% m/m
Tebuconazole	0.18% m/m
Propiconazole	0.18% m/m
Appearance	Viscous blue liquid
Viscosity at 20° C	Approximately 25cp
Density at 20° C	1.20
Dilution	Highly water miscible
Odour	Characteristic, low odour
Flash point	Non flammable
Packaging	1200kg containers (IBC) or bulk (tanker 20T)
Storage	Product must be frost protected
Shelf Life	24 months when the product is stored between 5° C and 25° C

Fields Of Application

- Construction Timber (beams, joist, framing, flooring, roofing, external joinery, etc.)
- Gardens and landscaping (playgrounds, decking, garden and recreational structures, fences, flower boxes, walkways, etc.)
- Wood used in agriculture (vineyard poles, horticultural supports, etc.)
- Industrial wood (poles P.T.T etc.)
- Wood packaging (containers, crates for export)
- Enclosures and fencing, noise barriers, guardrails.

Instructions for Use

Treatment procedure

Tanalith E 3475 is supplied as a liquid concentrate and must be mixed with water to obtain a stable treatment solution. The treatment solution is used in an autoclave using a combination of vacuum and pressure. The autoclave can be specified and provided by Arxada.

Moisture content of timber before treatment

The moisture content of timber before treatment should not exceed 30%. This condition is absolutely imperative in risk classes 3 and 4. For treatment of Spruce however, rapid drying to below 28% may reduce penetration, optimum conditions are achieved with air drying to circa 35-45% moisture content.

Specification for minimum preservative treatment (non termite) – EN599-1

Regions- Austria, Bulgaria, Croatia, Czech Republic, Germany, Greece, Italy, Poland, Romania, Serbia, Slovakia, Slovenia, Switzerland

Use Class	Retention as minimal average Kg Tanalith E 3475/m^3 analytical zone	Retention Requirements (Analytical Zone)	
		Permeable Species	Refractory Species
1 and 2	7.6	*NP1 (3mm)	*NP1 (3mm)
3	8.9	NP5 (full sapwood)	NP2 (3mm)
4	15.6	NP5 (full sapwood)	NP3 (6mm)

Preparation of solutions

1. Pour the concentrate gradually into water with constant stirring in the mixing vessel. Heating is not required, the solubility of Tanalith E 3475 at room temperature is sufficient.
2. Check the concentration of the solution by using a hydrometer, taking into account the solution temperature. This check should be performed before impregnation operation (see Hydrometer Chart). Note, the hydrometer measurements are only indicative, because of variations in the quality of the dilution water, and other contaminants.
3. Deposits can form when using very high hardness water. Please contact Arxada for advice.
4. Always sterilise the solution by using the additive Tanagard, this should not exceed 0.05% w/v. Please contact Arxada for advice.

Control of concentration

See TERA update 'Solution Strength'.

Quality control

The concentration of the solution is determined on site using the hydrometer test. In addition, Arxada can regularly check the concentration to ensure that quality standards are met. See TERA update 'Solution Strength'.

Solution sterilant

It is essential to add sterilizing solution Tanagard in the diluted product to protect against the growth of microorganisms. This should not exceed 0.05% w/v. Please contact Arxada for advice.

Fixation and storage of treated wood

Fixation of Tanalith E 3475 is less temperature dependent than for chromium based products. The fixing of the copper is more rapid, especially at low temperatures.

After treatment, the wood must be stored in a drainage area protected from the elements (rain, snow, direct sunlight, etc.), until the surface is dry (usually 48 hours).

Health And Safety

For all biocidal products such as wood preservatives, danger can arise from misuse and failure to use the product following the guidelines issued.

These rules are provided by the Safety Data Sheet for the product concerned covering the product and the treated wood. Please ensure operators have read the Safety Data Sheets provided by Arxada before using the product.

Environment

The combination of copper with organic biocides has been specially developed to give optimum performance. During the selection of biocides, the fate of treated wood at the end of life was taken into account to achieve the minimum impact on the environment.

All precautions must be taken to ensure that the pure or diluted product is not released into the environment.

Any discharge of product, pure or diluted in nature is prohibited.

Comply with the regulations on pollution of AIR - WATER - SOIL.

For waste disposal refer to local market regulations.

Precautions For Use

Compatibility with other preservation products

Tanalith E 3475 concentrated form or diluted is not compatible with chromium containing products (eg CCA, CCB, CC). The use of an autoclave with two different types of products is therefore not recommended.

Corrosion

Tanalith E 3475 in concentrated form or diluted (to correct strengths) is not corrosive to steel parts. Contact between Tanalith E 3475 concentrated form and copper metals (eg. brass) should be avoided. With the dilute solution, it is necessary to inspect the condition of parts and brass vanes, during routine maintenance, and replace them with steel or stainless steel if necessary. For full information on the use of metal fixings and fasteners please refer to our Treated Timber User Guide.

Additional Literature

Treated Timber User Guide: Tanalith

TERA Update: Solution Strength

Further information on the product and treated wood are available upon request.

arxada

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Use wood preservatives safely. Always read the label and product information before use. All product information corresponds to Arxada's knowledge on the subject at the date of publication, but Arxada makes no warranty as to its accuracy or completeness and Arxada assumes no obligation to update it. Product information is intended for use by recipients experienced and knowledgeable in the field, who are capable of and responsible for independently determining the suitability of ingredients for intended uses and to ensure their compliance with applicable law. Proper use of this information is the sole responsibility of the recipient. This information relates solely to the product as an industrially applied, high pressure wood preservative. It may not be applicable, complete or suitable for the recipient's finished product or application; therefore republication of such information or related statements is prohibited. Information provided by Arxada is not intended and should not be construed as a license to operate under or a recommendation to infringe any patent or other intellectual property right. No claims are made herein for any specific intermediate or end-use application. All trademarks belong to Arxada or its affiliates or to their respective third parties and are used here only for informational purposes.
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