Technical data sheet



Aquawood Ligno+ Top M

5192

Water-based **highly transparent Thick-film glaze** for **wooden windows and front doors** for industrial and professional use

System-matched in 3-/4-layer structure

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General

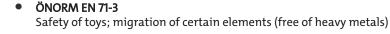
Water-based, breathable, highly transparent thick-coat glaze finish based on acrylic/polyurethane dispersions. The product is characterised by very good weather resistance, high transparency, high anti-blocking properties, block-resistance, flood water resistance and very good impact strenght.

Special properties and standards



Proof of suitability according to DIN EN 927-2







DIN 53160-1 and DIN 53160-2
 Perspiration and saliva-proof properties



French ordinance DEVL1104875A
 Marking of construction coating products for their emission of volatile pollutants: A+

Application area







For dimensionally stable timber components for exterior and interior use, such as e.g. wooden windows and front doors.

Not suitable for humid areas (e.g. indoor pools).

Not effective on coloured hardwoods such as meranti, mahogany, etc.

Particularly suitable for low resin softwood.

PROCESSING

Processing instructions





- Please stir the product before use. However, prevent entry of air while stirring.
- The temperature of the product and object, and the room temperature must be at least + 15 °C.
- The optimal conditions for use are between 15 25 °C with a relative atmospheric humidity between 40 - 80 %.

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- Too high dry film thicknesses from approx. 120 μm reduce the diffusion capacity and should thus be avoided.
- Sealants must be compatible with the coat and may only be applied once
 the paint has dried through. Sealing profiles with plasticizers tend to
 stick together in combination with paints. Please only use those types
 that have been tested.
- When changing from Aquawood Ligno+ Top M (5192) to other waterbased paint systems, care must be taken to adequately clean the pipes and spray equipment, preferably with warm water.
- Any change in the processing sequence, environmental conditions, nonobservance of instructions or the use of products not listed may have an unfavourable effect on the result. Deviations lead to film and adhesion problems as well as to impairments with regard to weathering and color stability.
- Please follow our ARL 300 Working guideline for coating dimensionally stable and limited dimensionally stable construction elements - General part along with all standards and guidelines for window construction.

Application technique







	Airless	Airless air-supported (Airmix®, Aircoat, etc.)	Cup gun
Spraying nozzle Ø (mm)		0,28 – 0,33	1,8 – 2,0
Spray nozzle (Ø inch)		0,011 – 0,013	-
Nozzle angle (°)		20 – 40	-
Spraying pressure (bar)		80 – 100	3-4
Vaporizer Air (bar)	-	0,5 – 1,0	-
Spraying distance (cm)	ca. 25		
Diluent	Water		
Diluent amount added (%)	0-5		10
Applied quantity per application (g/m²)		225 – 275	
Wet film (μm)		225 – 275	
Dry film complete coating system (µm)	80 – 120		

The shape and surface condition of the workpiece as well as the type of application influence the actual consumption. Accurate values for consumption must be obtained by applying trial coats in advance.

Drying times

(at 23 °C and 50 % rel. humidity)



Dust-dry (ISO 1517)	approx. 30 minutes
Tack-free	approx. 3 hour(s)
Stackable with PE fine foam spacers at room temperature	approx. 5 hour(s)
Stackable with PE fine foam spacers after forced drying 20 minutes Evaporation/dripping zone 90 minutes drying stage (35 - 40 °C) 20 minutes cooling stage	approx. 130 minutes
Dried through	approx. 12 hour(s)

The figures given above are reference values. The drying time depends on the type of substrate, coat thickness, temperature, air exchange and relative atmospheric humidity.

Lower temperatures and/or high level of atmospheric humidity can increase the drying time.

Avoid direct sunlight!

Cleaning the working equipment





With water immediately after use.

To remove dried paint residues we recommend using Aqua-Cleaner (8029) (diluted 1:1 with water).

	SUBSTRATE	
Type of substrate	Spruce, fir, pine, larch and oak in accordance with the guidelines for window construction.	
Substrate property	The substrate must be dry, clean, capable of holding the paint, free from separating substances such as grease, wax, silicone, resin etc. and free from wood dust, as well as tested for suitability for coating.	
Wood moisture	13 % ± 2 %	
	COATING SYSTEM	
Coating System	The following coating systems are exemplary.	
	CrystalClear-Technology (CCT) coatings must be applied exclusively in accordance with ARL 318 - Working guideline for the coating of dimensionally stable components CCT coatings.	
Impregnation	Spruce, fir, pine: 1 x Aquawood Ligno+ Base (5402000210)	
. 3	Oak: 1 x Aquawood Ligno+ Base Eiche Natur (5402100534)	
	Intermediate drying: approx. 4 hour(s)	
	Use wood preservatives safely. Always read the label and observe the respective technical data sheets of the products before use.	
	Please follow our ARL 056 - Working guideline for the use of wood preservatives.	
Intermediate coat	1 x Aquawood Ligno+ Sealer (5710)	
	Additional coating for oak, larch or generally for highly resinous softwoods:	
	1 x Aquawood Ligno+ Sealer SQ (5711)	
	Sealing all V-joints with V-Fugensiegel (7509).	
Intermediate sanding	Grit size 220 – 280	
	Remove sanding dust.	
Finishing coat	Spruce, fir, pine: 1 x Aquawood Ligno+ Top M Fichte Natur (5192084175)	
.	Larch: 1 x Aquawood Ligno+ Top M Lärche Natur (5192055666)	
	Oak: 1 x Aquawood Ligno+ Top M Eiche Natur (5192055667)	
For front doors	An additional application of Aquawood Protect (5128) (colourless two-component varnish) is necessary.	

	MAINTENANCE
Care	The durability depends on several factors: these include particularly the type
Care	of weathering, constructive protection, mechanical stress and the choice of colour applied. To obtain long durability, regular inspection, maintenance and, if necessary, repair measures are necessary.
	Annual cleaning with Top-Cleaner (7208) and maintenance with Top-Care (7227) in the package with Windoor Care-Set (7229).
	Please refer to the corresponding technical data sheets of the products.
Maintenance	Please follow our ARL 304 - Working guideline for coating dimensionally stable and limited dimensionally stable construction elements - Maintenance and repair.
	ORDERING INFORMATION
Size of trading unit	5 kg, 25 kg, 90-kg-Polybarrel
Colour shades / Glosslevels	Standard colour(s):
	CCT (5192000250) Fichte Natur (5192084175)
	Lärche Natur (5192055666) Eiche Natur (5192055667)
	The final colour is basically obtained from the inherent colour of the wood, the applied quantity, the colour of the impregnation and the colour of the finishing coat.
	In order to ensure uniformity of the colour shade, use only material with the same batch number on a given surface.
	It is recommended to prepare a trial colour sample on the original substrate using the coating system selected in order to assess the final colour shade.
	Please observe our ARL 800- Working guideline for working (including care and maintenance) with ADLER Mix, PUR Mix and Color4You dosing machines.
Supplementary products	Aqua-Cleaner 8029 (8029) Aquawood Ligno+ Base (5402)
	Aquawood Ligno+ Sealer (5710)
	Aquawood Ligno+ Sealer SQ (5711) Top-Care (7227)
	Top-Cleaner (7208) V-Fugensiegel Transparent (55630)
	Windoor Care-Set (7229) Please refer to the corresponding technical data sheets of the products.
	FURTHER DETAILS
Durability / storage	Min. 1 year(s) in the original sealed containers.
	Make sure the product is protected against moisture, direct sunlight, frost and high temperatures (above 30 °C).
	Class around containers well and use up the content as soon as nessible
	Close opened containers well and use up the content as soon as possible.
Technical specifications	VOC content of the ready-to-use mixture: EU limit for Aquawood Ligno+ Top M (Cat A/e): 130 g/l. Aquawood Ligno+ Top M contains maximum 40 g/l VOC.

DGNB (German Sustainable Building Council)

Quality level 4 (with factory coating)

Safety information



The product is only suitable for the industrial and professional use.

When sanding, use at least a P2 dust filter as personal safety equipment to protect against abrasive and wood dust. In case of hardwood (especially for Beech, Oak) a dust filter P3 is recommended.

The inhalation of paint aerosols during spray application must generally be avoided. This is ensured by the proper use of a respirator (combination filter A2/P2).

Further information on the subject of safety during transport, storage and handling as well as disposal can be found in the relevant safety data sheet. The current version can be accessed on the Internet at **www.adler-lacke.com**.