

Aquawood Diamond-Top D

5090

Pigmented two-component coating system for premium wooden windows for industrial and commercial use

System-matched in combination with Aquawood Diamond-Sealer D

PRODUCT DESCRIPTION

General

Water-based, matt, opaque pigmented two-component coating system with excellent weather and UV resistance. The product is characterized by very good scratch resistance, perfect water protection, high block resistance, high chemical resistance and very good permanent elasticity with simultaneous hardness and short drying times.

Special properties and standards



- Proof of suitability according to DIN EN 927-2



- ÖNORM EN 71-3
Safety of toys; migration of certain elements (free of heavy metals)



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



- **Cradle to Cradle Certified™ Silver**
Cradle to Cradle Certified® is the global standard for products that are safe, circular and responsibly made.



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

Application area

Premium wooden windows for exterior and interior use.



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 %.
- Do not close containers with hardened material.
- 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 Diamond-Top D (5090) to other water-based paint systems, care must be taken to adequately clean the pipes and spray equipment, preferably with warm water.
- Finely structured surfaces can be achieved by adding Aquafix S (8110). At the same time, the high mechanical resistance is further increased. Add up to max. 8 %.
- Any change in the processing sequence, environmental conditions, non-observance 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.

Blending ratio



100 part(s) by weight or by volume Aquawood Diamond-Top D (5090)
5 part(s) by weight or by volume Aqua-Hardener 8450 (8450000210)

Aquawood Diamond-Top D (5090) can only be used with a hardener and in the mixing ratio specified. Deviations lead to film and adhesion problems.

Aqua-Hardener 8450 (8450000210) must be carefully worked into the coating components by stirring before processing. After addition of hardener, a waiting time of approx. 10 minutes is recommended for improved degassing.

Pot life

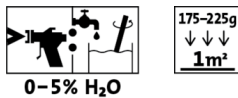


2 hour(s)

A further extension of the pot life is not possible.

Increased temperatures reduce the pot life.

Application technique



	Airless	Airless air-supported (Airmix®, Aircoat, etc.)
Spraying nozzle Ø (mm)	0,28 - 0,33	
Spray nozzle (Ø inch)	0,011 - 0,013	
Spraying pressure (bar)	80 - 100	
Vaporizer Air (bar)	-	1 - 2
Spraying distance (cm)	25	
Diluent	Water	
Diluent amount added (%)	0 - 5	
Applied quantity per application (g/m ²)	175 - 225	
Wet film (µm)	175 - 225	
Dry film complete coating system (µm)	100 - 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. 5 hour(s)
Dried through	approx. 12 hour(s)

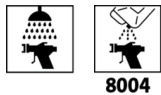
If necessary, a forced drying is also possible.

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 (8004) (diluted 1:1 with water).

SUBSTRATE

Type of substrate

Wood 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

General

The following coating systems are exemplary.

Impregnation

1 x Aquawood Primo A2 (5452)

Intermediate drying time: approx. 4 hours

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

Softwoods:

1 x Aquawood Diamond-Sealer D (5520)

Hardwoods and Larch:

2 x Aquawood Diamond-Sealer D (5520)

Intermediate sanding



Grit size 220 – 240

Remove sanding dust.

Finishing coat

1 x Aquawood Diamond-Top D (5090)

MAINTENANCE

Care

The durability depends on several factors: these include particularly the type 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 Window Care-Set (7229).

Touching up minor flaws with the original material.

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

4 kg; 20 kg

Colour shades / Glosslevels



Colour shades can be obtained using the **ADLER colour mixing system ADLERMix.**

Base paint(s):

Aquawood Diamond-Top D W10 Weiß, tönbar (5090000010)

Aquawood Diamond-Top D Basis W30 (5090000030)

Anti-Heat equipment available.

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 (8004)

Aqua-Hardener 8450 (8450)

Aquafix S (8110)

Aquawood Diamond-Top D (5090)

Aquawood Primo A2 (5452)

Top-Care (7227)

Top-Cleaner (7208)

Window 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).

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 Diamond-Top D (Cat A/d):130 g/l.

Aquawood Diamond-Top D contains maximum 50 g/IVOC.

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.
