

COMPANY WITH
MANAGEMENT SYSTEM
- UNI EN ISO 9001 -
- UNI EN ISO 14001 -

Sherwin-Williams Italy S.r.l. – con unico socio
Via del Fifico, 12 - 40065 Pianoro (BO) - Italia - C.P. 18
tel. +39 051 770 511 - fax +39 051 777 437
www.sayerlack.com
Cod. Fisc. e Reg. Impr. Bo 08866930152
P. IVA: IT 00494251200 - R.E.A. n. 313180
Cap. Soc. Euro 2.626.182 I.V. - Codice Mecc. Bo 014531

Company under the direction and coordination of The Sherwin-Williams Company, USA

Technical Data Sheet

AZ21**/XX HYDROPLUS WATERBORNE THIXOTROPIC TOPCOAT FOR EXTERIOR

Supersedes previous issue dated 02/19/13

DATE 05/24/17



Versions and colors:

AZ2120/00	20±2	gloss, clear
AZ2120/85	20±2	gloss, larch
AZ2120/89	20±2	gloss, teak
AZ2120/95	30±2	gloss, dark walnut
AZ2130/00	30±2	gloss, clear
AZ2130/83	30±2	gloss, beech
AZ2130/85	30±2	gloss, larch
AZ2130/89	30±2	gloss, teak
AZ2130/92	30±2	gloss, walnut
AZ2130/93	30±2	gloss, light walnut
AZ2130/95	30±2	gloss, dark walnut
AZ2145/85	45±2	gloss, clear
AZ2145/85	45±2	gloss, larch
AZ2160/85	60±2	gloss, larch

The AM0546/XX waterborne protective wood stains, colours 51, 66, 84, 88, 90, 92, 93, 94, 95 overcoated with waterborne topcoat AZ21XX/89, 92, 93, 95 (minimum thickness: 300 micron wet) have been awarded the prestigious certification **CATAS CQA** by CATAS, an Italian Laboratory of research and testing in wood industry.

The AM0546/XX waterborne protective wood stains, colours 84, 88, 92, 94 overcoated with waterborne topcoat AZ21XX/89, 92, 93, 95 (minimum thickness: 300 micron wet) have been awarded the prestigious national certification **CATAS CQA PLUS** and international certification **CATAS WKI PREMIUM** and **CATAS WKI PREMIUM PLUS** by laboratory CATAS and Fraunhofer Wilhelm-Klauditz-Institut WKI, German Institute of research and development. This award certifies that the coating system described above complies with the European Standard **UNI EN 927-2** and additional requirements of the technical specifications established by CATAS WKI PREMIUM COATING SYSTEMS FOR EXTERIOR WOOD.

The topcoat AZ21XX/00 has also passed extreme tests of outdoor durability obtaining excellent results in Florida certified by authoritative American laboratory Q-Lab, and the EVERSUMMER test in Florida and Australia certified by international laboratory ATLAS.

With the EXTREME external exposure test, longer than one year and according to the European standard EN 927-3, the cycle AM0546/xx and AZ21xx/xx achieved the highest quality levels rising simultaneously the triple exposure in Ohio, Mexico and Russia.

N.B.: DATA PROVIDED ON THIS TECHNICAL DATA SHEET CORRESPOND TO OUR BEST KNOWLEDGE AND EXPERIENCE. WE ASSURE CONSISTENCY ON THE CHEMICAL-PHYSICAL CHARACTERISTICS OF OUR PRODUCTS, WITHIN THE TOLERANCE LIMITS SPECIFIED ON OUR TECHNICAL DATA SHEETS. RESPONSIBILITY OF FINAL RESULT OF PRODUCT APPLICATION IS FULLY UP TO THE USERS, WHO SHALL MAKE SURE THAT THE PRODUCT CORRESPONDS TO THEIR OWN NEEDS WITH REGARD TO APPLICATION SYSTEM, TO SUBSTRATES USED AS WELL AS TO WORKING CONDITIONS.
WARNING: ACTUAL VISCOSITY OF SOME PIGMENTED AND/OR THIXOTROPIC PRODUCTS MAY DIFFER FROM THE VISCOSITY SHOWN ON THE TECHNICAL DATA SHEET. DIFFERENCES ARE TO BE REGARDED AS ACCEPTABLE IF WITHIN 30% MAXIMUM.

Technical characteristics

Area of use:	Door and window frames and any other wooden item exposed outdoors.
Method of use:	Spray (conventional, airmix, airless and electrostatic, provided equipment suitable for waterborne products is used).
Thinning:	Ready to use. If thinning is required, use 5 - 10% tap water.

Technical characteristics

Solids content (%):	41 ± 1
Specific gravity (kg/l):	1.030 ± 0.020

General characteristics

Drying time(200 µm at 20°C):	Touch dry: 4 hours Through dry: 8 hours Stackable: 24 hours Overcoatable: 4 - 5 hours
Forced air drying (200 µm at 30°C):	Through dry: 150 - 180 minutes Stackable: on exit from oven Overcoatable: 2 - 3 hours
Application weight per coat (µm wet):	from 150 to 300
Number of coats:	2 max.
Interval between coats:	within 24 hours with no sanding in between
Spreading capacity (m²/kg):	from 2 to 4 depending on application system
Shelf-life (months):	15

AZ21**/XX is a one-pack waterborne topcoat with excellent elasticity and durability that make it ideal for protecting wooden items for outdoor exposure, very good wettability and ease of application. AZ21**/XX is specially formulated to provide characteristics required for industrial applications, such as flow, transparency and water resistance without the need to add a cross-linker.

Following are its main features:

- Versatility of application: excellent results both with industrial and non-industrial systems.
- Protection from UV radiation: AZ21**/XX contains special UV filters ensuring an effective protection against UV radiation.
- Waterproof: similar to solvent based products.
- Not subject to blocking
- Quick drying
- Not subject to spontaneous combustion
- Not subject to lift, even when overcoated at short intervals.

Preparation of the substrate

Hydroplus AZ21**/XX clear topcoat is to be applied on wood previously treated with Hydroplus protective wood stains AM0546/XX or AM0549/XX. If a coat of basecoat in between is preferred, we recommend AM0473/00 for spray application and AM0490/00 in case of flow-coating.

Application system

By spray (conventional, airmix, airless or electrostatic) either horizontally or vertically.

Application weight is the following:

- one coat systems: apply one coat by 275 - 300 µm wet
- two coats systems: sanding between the two coats may be avoided provided that interval between coats is within 24 hours. If this last system is adopted, apply two coats by 150 µm wet each.

Application devices

- For conventional spray guns: 2.2 - 2.5 mm nozzle, pressure 3 - 4 bars.
- For airmix spray guns: 11-13 nozzle, material pressure 80 -110 bars, air pressure 1 - 2 bars.
- For airless spray guns: 11-13 nozzle, material pressure 150 - 200 bars.
- The use of a pre-atomizer and/or of a pre-heater (30 - 35°C) has proven to give excellent results in terms of flow and high quality consistency.

Application devices are to be washed with water immediately after use. In case dry films of coating are to be removed, use XA4060/00 letting it work for 6 - 12 hours, then rinse with water.

Drying

Waterborne products must be dried in rooms with temperatures no lower than 15°C and relative humidity no greater than 85%. For good drying it is advisable to use a forced flow of dry air, preferably dehumidified at 28 - 30°C.

General instructions

- Store the product in rooms with temperature between 5°C and 35°C.
- Add only once, in the hottest days during summer or in tropical areas, from 3 to 4% of XA4026/00 drying regulator to improve wetting and reduce drying speed.
- If the coating left is expected to be re-used after 5 - 10 days, we recommend to add on the whole quantity to be recovered from 2 to 4% of XA4017/00 modifier to prevent problems of thickening, poor flow and decay.
- During application, keep the product, the substrate and the room at a temperature of at least 15°C. Films created at temperature below 15°C exhibit chemical and mechanical resistance properties below the commonly achieved standards.
- Coating residues (washing water, booth water, used coating) must be disposed of in accordance with current legislation. Do not pour residues down drains.
- Please refer to the relevant Material Safety Data Sheet for safety information

N.B.: DATA PROVIDED ON THIS TECHNICAL DATA SHEET CORRESPOND TO OUR BEST KNOWLEDGE AND EXPERIENCE. WE ASSURE CONSISTENCY ON THE CHEMICAL-PHYSICAL CHARACTERISTICS OF OUR PRODUCTS, WITHIN THE TOLERANCE LIMITS SPECIFIED ON OUR TECHNICAL DATA SHEETS. RESPONSIBILITY OF FINAL RESULT OF PRODUCT APPLICATION IS FULLY UP TO THE USERS, WHO SHALL MAKE SURE THAT THE PRODUCT CORRESPONDS TO THEIR OWN NEEDS WITH REGARD TO APPLICATION SYSTEM, TO SUBSTRATES USED AS WELL AS TO WORKING CONDITIONS.

WARNING: ACTUAL VISCOSITY OF SOME PIGMENTED AND/OR THIXOTROPIC PRODUCTS MAY DIFFER FROM THE VISCOSITY SHOWN ON THE TECHNICAL DATA SHEET. DIFFERENCES ARE TO BE REGARDED AS ACCEPTABLE IF WITHIN 30% MAXIMUM.

COMPANY WITH
MANAGEMENT SYSTEM
- UNI EN ISO 9001 -
- UNI EN ISO 14001 -

Sherwin-Williams Italy S.r.l. – con unico socio
Via del Fifico, 12 - 40065 Pianoro (BO) - Italia - C.P. 18
tel. +39 051 770 511 - fax +39 051 777 437
www.sayerlack.com
Cod. Fisc. e Reg. Impr. Bo 08866930152
P. IVA: IT 00494251200 - R.E.A. n. 313180
Cap. Soc. Euro 2.626.182 I.V. - Codice Mecc. Bo 014531

Company under the direction and coordination of The Sherwin-Williams Company, USA

WARNING: NATURAL RESIN ESCAPE.

Many timber species, especially conifers such as pine, larch, Douglas fir and spruce, contain large quantities of natural resin in capillaries and resin sacs near knots. It is virtually impossible either to eliminate this resin by drying out the wood or to use coatings to block it. Sooner or later the heat of the sun will cause the resin to escape. Nonetheless, the only real damage is to the aesthetic appearance of the material and the quality of the film is not affected.

N.B.: DATA PROVIDED ON THIS TECHNICAL DATA SHEET CORRESPOND TO OUR BEST KNOWLEDGE AND EXPERIENCE. WE ASSURE CONSISTENCY ON THE CHEMICAL-PHYSICAL CHARACTERISTICS OF OUR PRODUCTS, WITHIN THE TOLERANCE LIMITS SPECIFIED ON OUR TECHNICAL DATA SHEETS. RESPONSIBILITY OF FINAL RESULT OF PRODUCT APPLICATION IS FULLY UP TO THE USERS, WHO SHALL MAKE SURE THAT THE PRODUCT CORRESPONDS TO THEIR OWN NEEDS WITH REGARD TO APPLICATION SYSTEM, TO SUBSTRATES USED AS WELL AS TO WORKING CONDITIONS.

WARNING: ACTUAL VISCOSITY OF SOME PIGMENTED AND/OR THIXOTROPIC PRODUCTS MAY DIFFER FROM THE VISCOSITY SHOWN ON THE TECHNICAL DATA SHEET. DIFFERENCES ARE TO BE REGARDED AS ACCEPTABLE IF WITHIN 30% MAXIMUM.