

04/07/25

Composite Sealer

(Note: Any reference to composites in this data sheet refers to 'Wood Plastic Composites' only. Composite Sealer is not recommended for use on 'Capped Composites', without pre-testing).

Composite Sealer is a waterborne protective treatment designed for use over wood/plastic composite substrates.

- **Product:** Composite Sealer
- **Product Code** 888CI-XXXX Four figure suffix denoting Gloss level
- **Standard Colours:** Clear and Various colours
- **Gloss level** Matt
- **Thinning/clean up:** No thinning required, clean up with water.
- **Drying Time** 20-30 minutes touch dry at ambient temperature of 25° C with good ventilation. (Note drying times will be slower in cold damp conditions or if applied in high humidity)
- **Full Cure** Up to 10 days
- **Recoat Time** 1-2 hrs
- **Exterior Exposure** Generally up to 5 years depending on degree of traffic, exposure, and condition of composite boards.
- **Container Size** 4, 10lt
- **Shelf Life** 12 months in original un-opened package
- **Flash Point** Non-Flammable

Uses: Composite Sealer has been designed to protect first generation WPC (Wood Plastic Composites) against food, oil staining and dirt retention whilst restoring water repellency. It is applied over correctly prepared composite wood substrates, worked evenly over the entire surface with lamb's wool/mohair applicator, or brush. Composite Sealer is quick and easy to use providing UV protection, exhibiting colour enhancement whilst locking in pigmentation and slowing down the weathering process.

General Recommendations

- Do not apply Composite Sealer below 10°C or above 25°C (or surface is too hot to walk on bare foot)
- Do not apply with relative humidity above 85% or if rain is imminent.
- Substrate must be dry. Do not apply on wet or damp surfaces.
- Avoid application in direct sunlight. (Avoid uneven finish, apply over small sections, three full lengths at a time, lightly back wipe or brush out any excess sealer to remove pooling or lap marks).
- Do not apply over existing solvent or water-based oils/coatings other than Aqualis Sealer, belt sand 60-80 grit or strip off old coatings using Aqualis StripEase refer technical data for instructions.

New & Weathered WPC Composites

Composite Wood materials may lighten over time, surfaces may also be affected by imbedded dirt, stains, or microbial growth. First generation WPC Composites can be rejuvenated by using Aqualis Composite Sealer.

Composite Sealer is a tinted product and may vary in colour depending on the age and weathering of the composite surface. It is advisable that a small test area is trialed to ensure correct colour, and adhesion is possible on the brand of WPC Composite being coated.

Previously treated WPC Composites requiring colour restoration.

If previously sealed with Aqualis Composite Sealer and no lifting or flaking has occurred, simply wash the deck using Aqualis Deck Bright, follow the technical data sheet guidelines and once dry Composite Sealer can be applied directly over the existing sealed surface. Badly stained or damaged surfaces, or all other previous coatings, we recommend sanding using a belt sander with 60-80 paper or remove old coatings using Aqualis StripEase (refer data sheet or label instructions) back to raw composite.

Prepping Composite Surface

Generally imported composites are supplied 'Brushed' (lightly sanded) and can be readily coated with **Composite Sealer**. ModWood®, a leading Australian manufacturer of composites, offers a 'Natural Grain' finish with a 'Brushed' side and a 'Smooth' side. Please follow the guidelines for Brushed versus Smooth as detailed below.

Brushed side

1. Thoroughly pre-wet the surface, surrounding walls and vegetation with water. Mix 10 parts water to 1 part **Composite Bright** by volume. Apply the diluted solution using a mop, brush, or spray.
2. Scrub surface with a hard bristle broom or for large areas, a mechanical deck scrubber, ensure all spots and blemishes have been removed. Wash off after approximately **3-5** minutes with clean water from garden hose jet. (Do not use a high-pressure Gernie or Karcher wand with a nozzle as this may damage the composite leaving swirl marks and lines). Allow at least one hour to surface dry.
3. If composite is ModWood® 'Natural Grain'.... 'Brushed side' up, **Composite Sealer** can be applied immediately once the cleaning procedure has dried off.

Smooth side

1. For ModWood® Natural Grain.... 'Smooth side' up, it is recommended to lightly sand the surface with a 'belt sander'. Sand along the length of the board following the direction of the grain removing approximately 1-2 mm using 60-80 grit sanding pad or paper. (Wear appropriate dust mask and eye protection)
2. Thoroughly pre-wet the surface, surrounding walls and vegetation with water. Mix 10 parts water to 1 part **Composite Bright** by volume. Apply the diluted solution using a mop, brush, or spray.
3. Scrub surface with a hard bristle broom or for large areas, a mechanical deck scrubber, ensure all spots and blemishes have been removed. Wash off after approximately **3-5** minutes with clean water from garden hose jet. (Do not use a Gernie or Karcher high pressure cleaner nozzle as this may damage the composite by leaving swirl marks or lines). Allow at least one hour to surface dry.

Absorption Test

After the surface has been prepped and is dry, water test the surface before coating. Pour 50 ml of water on at least three random sections of deck and allow to sit for 15min. Wipe off water and check for any dampness or shadowing. If water beading occurs or the surface is resistant to water penetration, do not commence coating. Repeat the sanding procedure to ensure water penetrates the surface and is not repelled.

Mould Problem Areas

Once the surface has been prepared and is ready for painting it may be treated, if required, against fungal infestation. **Never apply Composite sealer directly onto a mould infested surface.**

Microbial growth is dependent on several factors, generally poor ventilation, persistent moisture, dirt pickup, organic debris from surrounding vegetation, climatic conditions etc. If microbial growth is persistent, the cause may be site or structurally specific and may need to be addressed to eliminate the problem. Conditions which include environmental, lingering dampness, poor soil drainage, inadequate ventilation, structural faults, no moisture barrier, lack of maintenance or a combination of which may all contribute to mould, mildew, algae, or lichen regrowth and ultimately damage and costly repairs. Treating the surface may intermittently minimize microbial regrowth on the 'surface', however, beneath the surface will continue to be a problem so long as the root cause has not been eliminated.

After surface has been cleaned/sanded as per Prepping Instructions, allow the surface to completely dry before treating with Diluted No Fungal Pro Solution.

- Dilute 10 Parts water to 1 Part **No Fungal Pro** by volume.
- Apply diluted **No Fungal Pro** by mop, broom brush, spray, and work well into the composite allowing chemical to thoroughly soak in. Usually one coat is adequate, for severely affected areas a second treatment may be necessary.
- Allow surface to completely dry out.
- Ensure all 'wet' treated areas are secured from household pets.
- Once dry, the composite is Ready for Sealer coats.

Treatment will help control the rate and spread of microbial regrowth, but in the presence of persistent dampness and dirt build up, regrowth will most likely re-occur. This can be due to a localised issue such as poor drainage, plumbing faults, or environmental location. Once mould is present, it will be a continuous maintenance issue. Please follow maintenance recommendations.

Application Of Composite Sealer Clear/Colour.

Apply 1st Coat of **Composite Sealer**, to 3 full lengths of boards at a time. Using a lamb's wool applicator or brush (washed in water prior to use) apply evenly over the surface and allow 2 - 4 hr. drying.
Apply 2nd Coat of **Composite Sealer** as previously detailed. Do not allow pooling of Composite Sealer on the surface, lightly back-wipe any excess material evenly to minimise lap marks.

Avoid applying **Composite Sealer** in direct sun as the composite wood surface may be too hot and will cause product to flash off too fast thus creating lap marks.

Do not apply thick coats, best results are achieved by applying 2-3 thin coats to achieve a dry film build of 30 – 60 microns.

Note: Ensure **Composite Sealer** is applied evenly over the entire surface, including open cut ends and butt joints to minimise water ingress.

Anti Slip Requirement

**Slip Resistant Finish as per AS 4586-2013
(As Certified by ATTAR. Reference 15/9596.1 dated 19/11/2015)**

WPC TRACTION

If a slip resistant finish is required to either (P4) for flat surfaces or (P5) for ramps etc., use **WPC Traction** and follow the instructions on the technical data sheet.

Maintenance

Extended exterior durability can be achieved provided Sealer substrate is protected from elements of weather and direct sunlight. Intermittent cleaning with a soft bristle broom every three months with **Aqualis Composite Bright** keeps the surface free from tree sap, dirt, algal or mould growth and will extend the appearance and life of both untreated and treated composite substrates. Performance and durability of **Composite Sealer** is ultimately dependent on the condition of the wood composite substrate. It is therefore the discretion of the end user to ensure surfaces are washed using **Aqualis Deck Bright** at least once every 3 months and re-coated as required to ensure extended life. Heavy foot traffic areas exposed to direct sunlight will show obvious signs of wear quicker than shaded, light traffic areas. When the coated Sealer structure starts to look weathered and or the colour has severely faded, clean with **Composite Bright** and re-apply a maintenance coat of **Composite Sealer**.

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