Coppercoat Multi-Season Epoxy Anti-foul

Product Data Sheet

PRODUCT DESCRIPTION

A water based, easy to apply, epoxy anti-foul for protection of underwater surfaces against marine fouling.
* Useable down to 8°C
* Fast drying allows the necessary multiple coat application in a single day

PRODUCT INFORMATION

Colour: Copper Brown
Finish: Semi-gloss
Specific Gravity: 2
Volume Solids: 75%
Mix Ratio: 1 part Base Resin to 1 part Hardener to 0.9 part Copper powder (by volume)
Typical Shelf Life: 12 months at 20°C/68°F
VOC (As Supplied): zero g/lt
Unit Size: 1 litre units

Surface Preparation

GRP: As is common with all epoxy coatings, it is important that the substrate to be coated is well prepared. All surfaces must be must be cleaned of all contaminates, including dirt, dust, grease, rust or loose paint. Two-pack epoxy coatings, such as Coppercoat, must be applied to sound and permanent substrates – consequently all surfaces must be cleaned of any previously applied single-pack paint coatings or conventional anti-fouling. The best way to achieve this is to low-pressure slurry blast the hull, though old paint can be removed by hand. Finally, the hull must be abraded to provide a good key for the new epoxy coating. The most efficient method is to use a random orbital electric sander, with 60 to 120 grade discs and paper. Remove the resulting dust before proceeding with the Coppercoat application – either using a soft brush or cloth. The hull can be washed with fresh water, but ensure this is allowed to dry before proceeding. Under no circumstances clean the hull with any solvents or oil-based products (such as Acetone).

Iron, Steel, Aluminium, Ferro-Cement, Wood: All can be equally successfully treated with Coppercoat. However, once these substrates have been cleaned, they must be primed with the appropriate epoxy system before proceeding with the Coppercoat application. Full instructions can be obtained from Aquarius Marine Coatings, as can a full range of the necessary epoxy primers.

Mixing:

Coppercoat is supplied in three parts; Pack A (resin), Pack B (hardener), and a bag of fine copper powder. Diligently mix Pack A with Pack B in an appropriately sized plastic container, then continue to mix while carefully adding the copper powder. Stir until a fully homogeneous mix is obtained, with all the copper held in suspension. Note: during the mixed pot life, the copper may settle to the bottom of the mixing bucket – consequently ensure to stir the product regularly to maintain the copper suspension.

Pot Life:

The mixed pot life of Coppercoat is 60 minutes at 10 degrees Centigrade, 45 minutes at 20 degrees Centigrade and 30 minutes at 30 degrees Centigrade. Never mix more product than can easily be applied within the time available. We recommend that Coppercoat be mixed one litre unit at a time.

Thinning:

Coppercoat should only be thinned with Iso-Propanol (available from Aquarius Marine Coatings). Under normal circumstances Coppercoat may be thinned (if necessary) by 5% for application by roller. Up to 20% thinner may be added for application by spray.

Environmental Conditions:

Do not attempt to apply Coppercoat if the ambient or hull temperatures are below 8 degrees Centigrade.
With the epoxy being water miscible until cured, protect the hull from rain for 48 hours.

Application:

The product should always be applied directly after mixing. Do not attempt to apply Coppercoat by brush. For application by roller, short-pile simulated mohair or high quality neoprene foam sleeves should be used (but not light duty cardboard-backed foam rollers). Coppercoat can also be applied by conventional spray – please contact Aquarius Marine Coatings for fuller details. Under normal circumstances a minimum of four coats are required. Second, third and fourth coats should be applied as soon as the previous coat allows – i.e. after approximately one hour at 20 degrees Centigrade. To ensure a satisfactory chemical bond between coats, all the required coats should be applied consecutively in a single day. Note: on most boats, by the time the first coat has been completed, the start point is sufficiently cured to accept the second coat – consequently the application of the Coppercoat system is a continuous one. If the vessel to be treated is too large to be painted with all coats in one day by the workforce available, simply treat a manageable sized section – apply all the necessary coats to this section from start to finish in one day, before proceeding with a further section at a later date. If any product is left over after four coats have been applied, continue the application until it is all used – this will ensure that the correct depth of copper is present. Never attempt to apply a coat too thickly as this will result in sagging and runs. Although the full cure is obtained after 5 days, the coating will be ready to launch after 72 hours at 20 degrees centigrade. The cure rate will be faster in warmer conditions and slower in cooler conditions. Treated boats will benefit from having the cured Coppercoat surface lightly burnished with fine “wet and dry” paper or sanding pad prior to immersion – this will expose the copper powder and increase the immediate potency of the anti-fouling. This process is particularly beneficial in areas of high fouling.

Compatibility/Substrates:

GRP Gelcoats & compatible epoxies: It should **not** be used over any one pack products.

Number of Coats: 4 (minimum) by roller (min. 250 µm DFT)
Coverage (Theoretical): 4m^2/lt (for completed treatment)
Recommended DFT: 250 microns (for completed treatment)
Recommended WFT: 360 microns (for completed treatment)

Application Methods: Roller or spray. (For information on spray settings please contact Aquarius Marine Coatings or your local distributor)

TRANSPORTATION, STORAGE AND SAFETY INFORMATION

GENERAL INFORMATION:

Exposure to air and extremes of temperature should be avoided. For the full shelf life of Coppercoat be realised ensure the containers are firmly closed and the temperature is between 8°C and 25°C.
Keep out of direct sunlight.

TRANSPORTATION:

Coppercoat should be kept in securely closed containers during transport and storage.
Safety GENERAL: Read the label safety section for Health and Safety Information, also available from our Technical Help Line +44 (0)1258 861059

DISPOSAL: Do not discard tins or pour paint into water courses, use the facilities provided. It is best to allow paints to harden before disposal. Remainders of Coppercoat cannot be disposed of through the municipal waste route or dumped without permit. Disposal of remainders must be arranged for in consultation with the authorities.