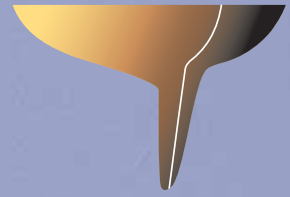


COPPER
COAT



MULTI-SEASON
ANTI-FOULING

WORLDWIDE: WORLDCLASS

10⁺
YEARS
LIFESPAN

Coppercoat uses include;



55ft GRP motor-boat
Chichester Harbour, 1998



36ft GRP sailing yacht
Portsmouth Harbour, 1995



65ft GRP motor-boat
Spain, 2001



Commercial use on GRP and steel tidal-power generator, Bristol Channel, 2002

The product

COPPERCOAT is the combination of a specially developed solvent-free epoxy resin and high purity (99%) copper. Each litre of resin is impregnated with 2 kilograms of ultra fine spherical copper powder, the maximum allowed by law, making COPPERCOAT the strongest copper based anti-fouling available. Indeed no other anti-fouling exposes as much active copper to unwanted marine life as COPPERCOAT.

Classified as non-leaching, this highly effective coating is considerably kinder to the environment than its' self-eroding competitors whilst continuing to deter growth year after year. **Indeed, correctly applied treatments resist weed and barnacle growth for a decade or more!** The complete treatment has been tested and approved by the Health and Safety Executive, in compliance with UK and EU law. Holding HSE Certificate Number 7532 our anti-fouling is fully approved for use by both professional tradesmen and the general public. Furthermore, COPPERCOAT fully complies with current (2001) International Maritime Organisation (IMO) Resolution MEPC.102(48).



190ft steel super-yacht
Greece, 2005



"Now must be the time to consider whether a long-term, non-eroding anti-fouling could be the answer to your fouling problems, both economically and environmentally."

Captains Log magazine (2002)

"Thank you for treating this, my third Coppercoated boat in nine years. It is a pleasure doing business with you."

Mr Banham
London, UK

"After nine years of heavy use I would now like to apply this fantastic product again."

Mr Rowe
New Plymouth,
New Zealand



40ft GRP commercial pilot vessel
Poole Harbour, 1994

Steel 120ft super-yacht
Italy, 2003

GRP 63ft Sunseeker power-boat
Oman, 1997

How it works

On immersion, sea water attacks the exposed pure copper powder, causing the formation of cuprous oxide. This highly effective anti-fouling agent deters growth until the surface degrades further to become cupric hydrochloride. This final copper form is highly unstable, and is washed away by the movement of the yacht, thereby removing any accumulating silt or slime. This automatically reveals a fresh copper rich surface, whereby the process recommences. With an average thickness of 250 microns of COPPERCOAT being applied in a treatment, and a typical corrosion rate of less than 10 microns per year, it is easy to appreciate how this coating offers such effective and long lasting protection.

Furthermore, the inherent waterproofing qualities of the epoxy ensures that a treatment of COPPERCOAT will help to prevent osmosis in GRP craft and offer extra protection against corrosion in steel vessels. With the resin carrier insulating each copper sphere, the total coating is inert and non-conductive. Consequently, COPPERCOAT does not cause electrolysis problems or cathodic decay on steel or aluminium craft. Sacrificial anodes should be fitted in the usual manner.



Three year continual immersion test Poole, UK

- 1 **Leading US conventional anti-fouling**
- 2 **COPPERCOAT**
- 3 **Leading UK conventional anti-fouling**

Strength & performance

Since the banning of tin derivatives, copper has become the most popular metallic element in modern anti-fouls. However, only COPPERCOAT uses copper of 99% purity. This not only guarantees the maximum production of the powerful anti-fouling agent cuprous oxide, but also allows the correct rate of degeneration and exposure. Tests show that in products using less pure copper, or weaker alloys such as copper nickel, anti-fouling performance is substantially reduced - the inevitable result of a slower release rate and lower production of active cuprous oxide.

When cured, the average pure copper content of modern COPPERCOAT is over 83% by weight, making it the most potent and copper rich anti-foul available to the general public.

It is this unique combination of copper purity, quantity and small particle size that allows COPPERCOAT to create and expose more active cuprous oxide to marine fouling than any comparable product. Consequently, the proven long-term performance of COPPERCOAT is unrivalled - as testified by legions of customers now enjoying their 11th, 12th and even 13th season of continuous protection!



"By reforming the epoxy resin carrier of Coppercoat anti-fouling, UK manufacturer Aquarius Marine Coatings has given this product increased anti-fouling performance, especially when a treated boat is first launched. Previously, said Ewan Clark, managing director, this was the time when a hull could be vulnerable to new growth as the original formula took some time to degrade and produce the cuprous oxide required to deter marine life."

International Boat Industry magazine (2004)

"The best performing anti-foul I have used, even now in its 7th season. Considering how inexpensive it is I don't understand why everybody doesn't have Coppercoat."

Mr Kendjian
Cannes, France



Coppercoat can be applied to craft of virtually all materials including (left to right) GRP fibreglass (1994), steel (1994), aluminium (1994), wood (1992)

Application

COPPERCOAT can be successfully applied to virtually all craft, irrespective of their size and usage, and is consequently sold to both the commercial and leisure sectors. While GRP vessels require no undercoat, boats constructed of wood, steel and ferro-cement can also be protected following the application of the appropriate primer.

Specifically designed to be user friendly, this solvent-free non-toxic coating should be mixed thoroughly, one unit at a time, and simply applied to the prepared surface by roller or spray. A complete treatment is usually achieved with four thin coats, applied "wet on tacky" in a single day.

Free instructional DVD



For full application details and technical information, please refer to the step-by-step application DVD.



1 Before treatment

Abraded, washed and ready for painting



2 First coat

Gelcoat highly visible through first thin application



3 Second, third and fourth coats

As the coating thickness builds the gelcoat becomes less and less visible



4 Ready for launch

After the full treatment has been applied the coating looks deeply copper rich. The hull is no longer visible through the dense COPPERCOAT system.

"After nine seasons of very effective protection I'm delighted with Coppercoat, a fantastic product."

Mr Smith
Walton, Essex

"My Coppercoat application of over six years ago has worked very well. My friends are very impressed and several have followed my lead!"

Mr. Fernandez
Gibraltar

"The Coppercoat is virtually the same as the day it went on in 1995 - it has saved us a small fortune."

Mr Standish
St.Lucia, Caribbean



On-going trial in the Netherlands.

Waterkampioen magazine
February 2005

Product quantity

To determine the quantity of COPPERCOAT required, calculate the hull area by simply multiplying the waterline length by the addition of the beam and the draft.

Then, depending on the vessel, apply a factor: for full bodied craft, such as motor boats or displacement hull keeled yachts, no factor is applied; for medium bodied craft, such as large fin and skeg or bilge keeled yachts, multiply by a factor of 0.75; while for light bodied craft, such as fin keeled yachts, multiply by a factor of 0.6.

If the calculation is in feet, multiply the figure by 0.093 to convert to square metres.

Given that COPPERCOAT has an effective coverage rate of 4 square metres per litre for a full treatment of all the necessary coats, divide this figure by 4 to determine how many litres are required.



COPPERCOAT applied Spring 1993



COPPERCOAT still effective 2003

1994 "I must say how pleased I am with the way the treatment is performing."

2003 "I have been delighted with the Coppercoat, now in its tenth season!"
Mr. Giles, Dorset, UK

Example #1

Boat:	34ft motor-boat
Waterline:	30ft
Beam:	12ft
Draft:	2ft
Calculation:	$30 \times (12+2) = 420\text{sq ft} \times 0.093$ $= 39.06\text{sq m} \div 4$
Requirement:	9.76 ltrs

Example #2

Boat:	30ft fin keeled yacht
Waterline:	26ft
Beam:	11ft
Draft:	5ft
Calculation:	$26 \times (11+5) \times 0.6 = 249\text{sq ft} \times 0.093$ $= 23.21\text{sq m} \div 4$
Requirement:	5.80 ltrs

AMC offer a full range of primers for all substrates, enabling COPPERCOAT to be used on GRP, iron, steel, aluminium, ferro-cement and wood surfaces. COPPERCOAT can also be incorporated into anti-osmosis schemes on GRP vessels. Contact AMC for further details and to discuss your particular requirements.



Aquarius Marine Coatings Limited
Shears Building, Stone Lane Industrial Estate
Wimborne, Dorset BH21 1HD

Tel: 01202 888802 | Fax: 01202 882100
email: info@coppercoat.com
www.coppercoat.com