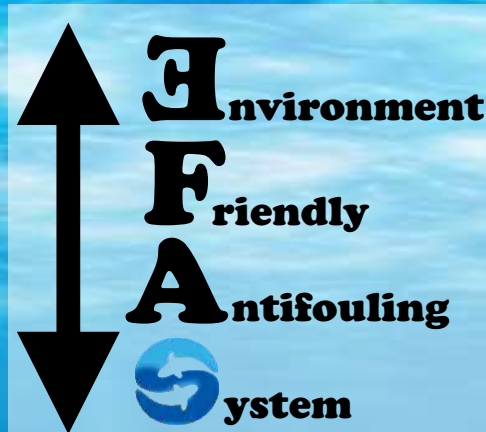




Biocide-free fouling control coating

One of the biggest global problems is invisible – hidden beneath the surface of the water.. Our goal is to produce a SAFE protection coating

Advanced Foul Release Coating For The Control Of Slime

Organisms like algae, mussels or barnacles rapidly colonise surfaces in maritime applications, such as ship hulls. The protective coatings primarily used to date contain substances like copper, which are harmful to the environment. The nets used in fish farming are also largely impregnated with copper-based coatings and release environmentally-toxic copper compounds into the water. SAFE is an environmentally-friendly coating to minimise fouling by marine organisms. It is one component, water based, fouling release coating biocide free and provides excellent abrasion, scratch resistance and performance. This is achieved by an extremely smooth surface, which is very difficult for organisms to attach themselves to.



BIOCIDE-FREE



CHEMICALLY
STABLE



MECHANICALLY
STABLE

SAFE has real and verifiable benefits to the environment and aquaculture

More and more freshwater and marine fish is bred in ponds, breeding tanks and net cages worldwide. The nets used in fish farming are also largely impregnated with copper-based coatings and release environmentally-toxic copper compounds into the water. The highest metal concentrations of extractable Cu were found in the sediment samples collected under the cages of the fish farms that used nets treated with antifouling paint. These



concentrations were 2 to 3 times higher than at farms using untreated nets. In addition, heavy metal concentrations were almost always lower in the biological samples collected from farms using untreated nets. The highest metal concentrations occurred in the liver tissue of cultured fish. All the aforementioned data indicate that the use of antifouling paints is the likely source of metal accumulation in farmed fish. To prevent this, we have developed an environmentally friendly net coating.

SAFE is biocide-free, which results in no leaching of biocides into the sea. This offers cost advantages on treatment and disposal of used nets, plus enhanced environmental profile.

Proven long-term performance

After 102 days (July-October) static period in the high fouling challenge East Mediterranean region (Thermaikos port), the area coated with **SAFE** coating (Number 4) showed zero fouling similar behavior to the sample that had been coated with conventional copper paint (Number 2), compared to the blank sample (Number 3).



Conventional copper paint (Number 2)

Blank sample (Number 3)

SAFE coating (Number 4)



0% Biocides

- **No leaching of biocides into the sea**
- **Enhanced health and safety for applicators**



Less paint and zero VOC emissions
Less waste disposal
Less time-consuming and exhausting manual cleaning work