UNIQUE ANTI-FOULING

INGREDIENT PASSES MULTIPLE MAJOR MILESTONES

By Catherine Austin, Editor

A unique anti-fouling ingredient that functions by temporarily stimulating barnacle larvae's swimming behaviour in order to repel the settlement of barnacles on ship hulls is to enter into the mainstream market following a 16-year journey from concept to industrialisation.

Chugoku Marine Paints (CMP) have been rigorously testing I-TECH's Selektope following their initial interest in the product's development almost ten years ago.

Selektope is distinguished by extremely low biocidal loading and is harmless to the marine environment. It is organic and non-metallic, with a proven efficacy of 0.1% weight/weight. This means that it can be included as a 0.1% constituent of antifouling coatings – only a fraction of the active substance for compatible to a traditional copper biocide. As only a small quantity of the ingredient is required, it has no impact on the chemical structure, colour or other cooperative biocides of a marine coating.

I-TECH say that at first, like many other paint manufacturers testing Selektope, CMP did not believe that the ingredient would work in such low concentrations. However, tests proved the efficacy at low concentrations and the remarkable performance of the ingredient and from that CMP decided to include the Selektope ingredient under both of their brands - SEAFLO NEO CF PREMIUM and the SEAFLO NEO-S PREMIUM.

CMP have stated that "Selektope is proving to be spectacularly effective in the prevention of barnacle attachment and is confirming itself capable of unsurpassed antifouling performance, even when a ship is at anchorage for months."

SEAFLO NEO CF PREMIUM uses zinc polymer technology that has an in-service life of more than five years and is applicable to all oceangoing vessels operating worldwide, whereas the SEAFLO NEO-S PREMIUM is based on silyl polymer technology and targets low activity vessels and even ships that are static for months. The SEAFLO NEO-S PREMIUM is currently being used in South Korean shipyards.

SEAFLO NEO CF PREMIUM has already been applied in full coats to vessels owned by shipping companies based in Sweden, Hong Kong, South Korea and Japan.

Initial commercial applications of marine coatings with Selektope, which is now fully approved for use by the relevant authorities in Japan, South Korea, China and Europe, took place in 2015. Its first publically-disclosed application took place at Sembcorp in Singapore, when a new copper-free product from CMP was applied to the side walls of the 2010-built, 46,000DWT chemical carrier *Calypso* operated by Sweden's Laurin Maritime.

Philip Chaabane, Chief Executive I-TECH, commented: "After a 16-year journey for Selektope through research, testing, approvals and industrialisation, we are honoured to be part of CMP's new premium antifouling range.

Earlier this year, Selektope passed another major milestone. Under the EU's Biocidal Products Regulation, Selektope achieved an industry-first approval as a pharmacological means of combatting barnacle settlement, sparking widespread interest for antifouling coatings.

Formal EC adoption of the approval regulation was signed by EC President Jean-Claude Juncker, meaning that Selektope is permitted for use under the European Union (EU) Biocidal Products Directive in antifouling products throughout the EU from 1 January 2016.

I-TECH say that they welcomed double the orders in the first part of 2016 compared with 2015 thanks to this approval.

The increase in demand following regulatory approval may be attributed to Selektope's ability to extend static performance of the coating. I-Tech has been able to meet this increased demand through its agreement with life sciences corporation Cambrex, enabling Selektope to be produced on an industrial scale.

In April this year, I-Tech's Selektope was awarded with the Environmental Performance Award at the European Marine Engineering Awards 2016 which celebrates the environmental benefits of a product, process or management approach as a result of implementation for the first time in 2015.■