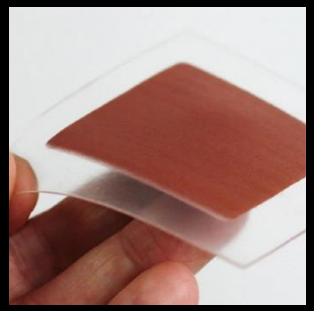
Long-term biofouling evaluation of Suricle™

BIOFOULING SOLUTIONS

Suricle™ is an adhesive polymer film with copper embedded into the surface through high speed cold spray. This product has been developed with the sole purpose of providing biofouling resistance to marine assets.

Kinetic Elements Pty Ltd. produced and supplied Suricle™ samples for Biofouling Solutions to conduct long-term independent biofouling resistance testing in Singapore.



Testing Methods

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Objective: Test the efficacy of the Suricle™ technology under static conditions in tropical waters.

Experimental Design:

- 5 x Suricle™ treatments (200 x 160 x 3 mm on Perspex plates)
- 3 x Controls (200 x 160 x 3 mm sandblasted black Perspex plates)
- 0.5 m depth from a floating marina pontoon

Location: Raffles Marina, Singapore

Deployment date: 10 April, 2019

Results

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	Frame	Suricle™ Treatment	Control
Start: 10 April, 2019			
9 months: 10 January, 2020			

Results

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	Frame	Suricle™ Treatment	Control
24 months: 5 May, 2021			
35 months: 12 March, 2022			

Results

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42 months:

24 November, 2022

(2 x treatments were lost during the COVID-19 lockdown)

Frame

Suricle™ Treatment

Control

Conclusions

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Despite the consistent accumulation of predominantly diatoms slimes, occasional acorn barnacle and hydroids, overall the Suricle™ treatments have resisted permanent accumulation of macrofouling for 42 months to date under static conditions in tropical waters.

The diatoms slimes washed off the Suricle™ treatments easily prior to each observation. The biofouling on the Controls did not wash off prior to each observation.

The Suricle™ treatment is superior, under the conditions of the testing, to any other anti-biofouling treatment seen by the author.

Dr Ashley Coutts
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