**Pollution-free! Anti-fouling Ship bottom Paints & Coatings** 

# Gaia Clean Balan Guard

Debut!

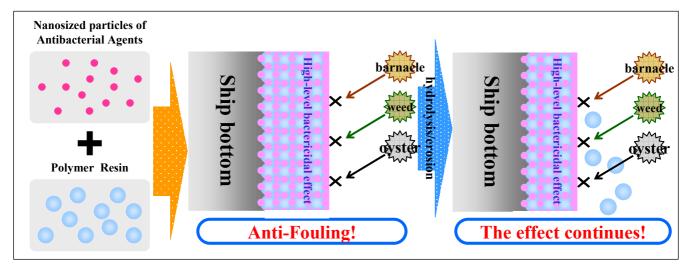
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Eco-friendly!
No barnacle and weed attach for a long term!
Long-awaited paints and coatings of the 21st century!



# Gala Clean Silicon Polymer Self-Polishing Bottom Paints

Gaia Clean is the hydrolyzable paints that are called "Self-Polishing". The hydrolysis/erosion process brings the exposure of a fresh surface of "Antibacterial agents manufactured on a nanoscale" constantly. So, it is effective even for the one that doesn't sail like a buoy and a pontoon, etc. The effect continues for about 1.5 - 2 years or more.





O Part where Gaia Clean was painted



# Features 1 4 1

- 1. It is the paint that discourage marine life from attaching.
- 2. It is effective even for the one that doesn't sail.
- 3. It is eco-friendly because it doesn't contain the toxic substance.
- 4. It is possible to paint on a surface coated by conventional paints.
- 5. The maintenance cost can be reduced.

#### Recommended for

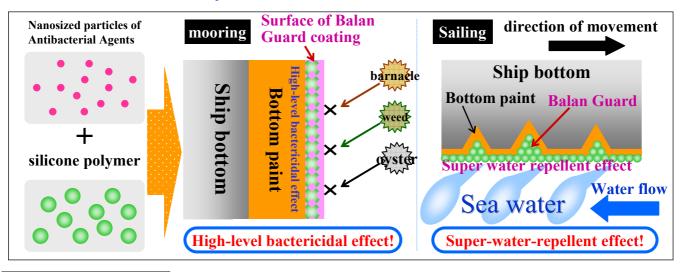
Buoy Pontoon Intake screen The underwater surface of oil storage etc.





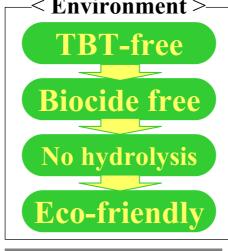
# Balan Guard **Super-water-repellent Silicone Clear Coatings**

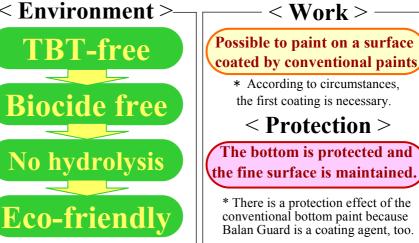
This product uses special silicone to provide a "Super-water-repellent effect", and uses "Antibacterial agents manufactured on a nanoscale" to provide a "High-level bactericidal effect". Slime may attach but it is automatically removed when you are motoring or sailing. The effect continues for about 3 years.



#### Features

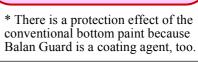






# Recommended for





## Simulation of fuel cost

# Experimental ship: FRP 30-feet diesel engine (150 hp $\times$ 2)

	First speed (speed over the ground)	Speed after 10months (speed over the ground)		Fuel use during year (*2)	Fuel cost during year (*3)
Conventional bottom paints		13 knots/h 2,600pps/m	65 liters/h	117 kl	Y8,892,000
Gaia Clean Balan Guard	/ 11	25 knots/h 3,000pps/m	45 liters/h	81 kl	Y6,156,000
Effect of Gaia Clean & Balan Guard		x 1.9	30% reduction		2 million 736 thousand yen reduction

- \*1 by authorized guidebook
- \*2 as the ship navigated for six hours a day for 300 days a year
- \*3 as 76 yen/l (duty free diesel oil)

## About Balan Gurd

- 1. Please examine it by the standard of your company because it is a prototype for "Balan Guard".
- 2. Various safety data has been confirmed.

# To use it safely -

Please observe all warnings and cautions described in the container or the instruction manual, when you handle the product. Especially, please read the warning sentence when there are an inflammability and a hazardous property. Please refer to Material Safety Data Sheet (MSDS) when a detailed content is necessary.

#### < NOTICE >

The product described in this pamphlet might change the specification and handling without a previous notice.

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