Euro Technology Profile

ملخص عن يورو للتكنولوجيا

Rust Remover

الامارات – الاردن – العراق – كينيا - الولايات المتحدة


AGUA-SR200
The Professional Rust Stain Remover
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Rust remover

We introduce AGUA-SR 200 rust change type rust removal agent of Agua Japan Co., Ltd.

AGUA - SR 200 is a new rust conversion type rust removal agent that effectively removes red rust and rust juice.

It is one-pack type and it does not have time to prepare, just apply it to the place where rust and rust juice comes out and wait for 30 minutes. When you wipe off with a chestnut etc., the beauty like paint standing revives. To prevent further returning rust, add rust conversion agent. The AGUA - SR 200, which has high workability and durability, is ideally suited for use on ships' decks.

Rust Remover AGUA-SR 200

Fall well
The rust removal ingredients dissolve the paint on the surface together with the rust juice. Only rust and scales are cleaned up cleanly, and the iron base can not be damaged.

No trouble
It is a one-part rust removal agent, troublesome pre-blending is unnecessary. Processing is completed in just one step of coating with a brush or roller, and washing with water is not required.

No return rust
Plus rust conversion ingredients plus. By converting the red rust that causes rust juice into a thin black rust coating, it effectively prevents the generation of return rust.

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Rust & Stain

Paint Coating

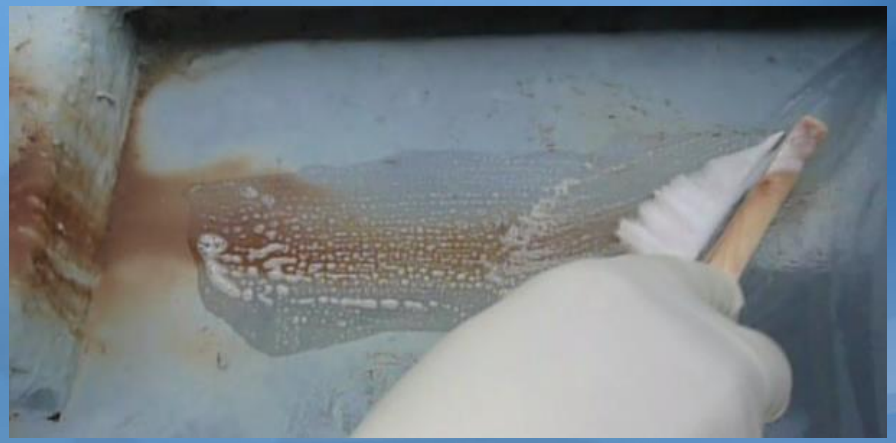
Steel Plate

01/11

Rust Remover AGUA-SR 200

Clean rust from Paint

Temporary rust prevention after removal of scales and rust of steel sheets and steel pipes such as on ship deck and after rust removal. It is also effective for long-term rust prevention paint base.



Antirust primer treatment agent

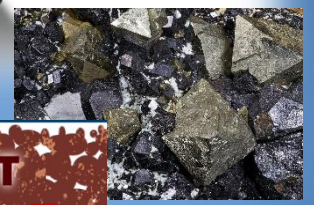
AGUA-MG100

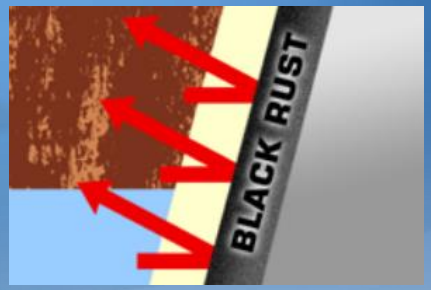
INSTRUCTION VIDEO

We will introduce AGUA-MG100 (commonly known as "Agua Marine Guard") anti-rust undercoat treatment agent of Agua Japan Co., Ltd.

Antirust primer treatment agent

AGUA-MG 100 (Agua Marine Guard) is a rust change one-pack type epoxy primer treatment agent. With high rust conversion capability, reducing red rust to black rust **(magnetite)** and stabilizing strongly prevents the occurrence of malicious rust under the coating film. It also boasts fast-drying properties. Since it dries quickly, it is possible to coat repeatedly after 1 hour (20 ℃). It is easy to handle one-pack type treatment agent, it can work with three kinds of substrate adjustment, workability is excellent, and it is stable for high performance even under severe conditions such as ship and marine building as well as general use We will demonstrate.





High anti corrosion ability	**Quickly dry**	**Excellent workability**

Meets safety regulations set by FDA (United States Food and Drug Administration)

Unlike vessels, decks, tanks, etc., the inside of holds may come into direct contact with food, so further safety is required.
AGUA - MG 100 (Agua Marine Guard) specializes in conformity with the safety standard (Food and Drug Administration of the United States of America) stipulated by safety standards (use as 175.300 Food Type VIII Food Type VIII as a vessel paint for ships in direct contact with food) Certificate of conformity certification has been acquired.
You can use it with confidence in the hold of gravity, maize, salt and other loaded vessels that load food.

Recommended Uses : Rusted steel surface in heavy duty environments, including ships (deck, cargo hold, ballast tanks, piping etc.), port cargo handling facilities, marine structures, FPSO, oil tanks, forklifts, etc.

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Implementation Procedure

Painting Specifications :

Process	Coverage / Description	Average Consumption (g/m2)	Dilution	Standard Thickness	Painting Interval
Recommended Method	Brush, Roller or Spray				
Surface Preparation	Remove loose rust/coating or oil using a hand scraper or wire brush, or powered tools when/if possible. For details, refer to instruction manual.	-	-	-	-
1st Coat	approximately 160~200㎡ / 16kg	80~100	None	10-13μ	1 hour (under 20°C conditions)
2nd Coat	approximately 160~200㎡ / 16kg	80~100	None	10-13μ	1 hour (under 20°C conditions)
Intermediate / top coats	acrylic or epoxy based paints at your choice	-	-	-	-

Note :

Actual figures may vary, depending on the material and weather conditions.

Before using, read carefully the instruction manual and SDS documents.

Coating Experiment

Background Photo : a hatchcover without MG-100 layer (above) and another with MG-100 layer (below)

Laboratory Test A (single coat – SPCC in salted water shower x 480hours @35℃ 98%RH)

Laboratory Test B (double coat – SPCC in salted water shower x 480hours @35℃

Types of rust

Red Rust

Hydrated oxide $Fe_2O_3 \cdot H_2O$
(high oxygen/water exposure)

Rust from Iron (III) oxides forms due to high oxygen and water exposure resulting in red rust.

- Red rust is the result of heavy exposure to air and moisture, combined many times with a contaminate (salt).
- This type of rust is most likely atmospheric because typically there are no signs of rust runs or streaks on the metal parts/equipment where the rust has formed.
- With red rust, there is uniform corrosion, most often from a very corrosive environment.

Yellow Rust

Iron oxide-hydroxide $FeO(OH)H_2O$
(high moisture)

Rust from Iron (III) oxides that is a very soluble iron oxide results in yellow rust.

- Yellow rust is distinguishable in recessed areas of the metal parts/equipment where the rust “runs and drips” (solvated rust).
- Yellow rust forms as a result of very high moisture content. It frequently found in settings where puddled/standing water has most likely been present.

Types of rust

Brown Rust

Oxide Fe2O3
(high oxygen/low moisture)

Rust from Iron (III) oxides with high oxygen and low moisture results in brown rust.

- Brown rust is a drier rust than those mentioned above.
- It is most likely atmospheric – having formed as a result of water and oxygen in the atmosphere and presenting as a reddish-brown crust on the metal's surface.
- Brown rust is sometimes localized rust which appears as non-uniform spots or only in certain areas rather than over the whole surface. It can be the result of a contaminate on the metal's surface often originating from the manufacturing process.

Black Rust

Iron (II)oxide – Fe3O4
(limited oxygen)

Rust from Iron (III) oxides with limited oxygen and low moisture results in black rust.

- Black rust can be visually identified as a thin, black film which is the result of oxidation in a low oxygen environment.
- Black rust has an appearance of almost a black stain. Most likely the areas exhibiting the black rust had something covering them, which prevented oxygen from reaching the surface.
- This type of rust is a more stable rust layer that does not propagate as rapidly as other rust forms.

Iron Oxide Black

Thank You