erstophob

WATER AND OIL - **REPELLENT**

TECHNICAL
DATA SHEET

Permanent, transparent Anti-Graffiti-, and Easy-to-Clean Coating

MARINE PROTECT

PROPERTIES/PRODUCT DESCRIPTION

- Permanent clear coating
- Excellent protection against graffiti
- Easy-to-Clean
- Excellent adhesion to most substrates
- Outstanding weather resistance
- High UV and chemical resistance
- Economical
- Easy to apply
- Cures at room temperature
- Fluorine-free

erstophob Marine Protect is a clear, ready-to-use coating solution that protects smooth, non-absorbent surfaces against graffiti and dirt.

Based on a patented polysilazane technology, **erstophob Marine Protect** forms a permanent barrier layer that bonds chemically with the substrate and cures at room temperature with atmospheric humidity.

The surface protected with **erstophob Marine Protect** can be cleaned repeatedly without reapplying the product.

USE

erstophob Marine Protect is particularly suitable for smooth, non-absorbent surfaces, such as one- or two-component paints (polyurethane or epoxy systems), polyester paints, GRP surfaces, aluminium surfaces.

The preferred use is for the exterior of commuter and intercity trains, trams and underground trains.

PRODUCT APPLICATION/TOOLS

erstophob Marine Protect is supplied ready-to-use.

Depending on the substrate **erstophob Marine Protect** can be applied with microfiber applicators or paint rollers (microfiber-flocking).

The product is also suitable for spray application.

Spray application:

Process	HVLP-compressed air
Spray gun	e.g. SATA minijet HVLP
Working pressure	ca. 2 – 3 bar
Nozzles	0.8 – 1.3 mm

The spray gun can be cleaned with n-butyl acetate, for example.

TECHNICAL DATA

Article Number	214052
Appearance	colorless to pale yellow liquid
Density	ca. 0.93 g/cm3
Solid content	20 – 60 %
Binder base	organic polysilazane
Solvent base	n-butyl acetate
Flash point	< 21 °C
Shelf life	12 months from production date at, 20 °C
Container size	6 liter alu bottle containing 5 liters

APPLICATION INSTRUCTIONS

The product should be applied by trained personnel only.

Test on a small area or apply a test coat before application.

CONDITION OF SUBSTRATE

The substrate to be coated must be clean, grease-free and absolutely dry. Areas which are difficult to reach, such as cavities or drainage channels etc. must be dried additionally with absorbent cloths or blown dry with compressed air.

On contact with a damp substrate surface, **erstophob Marine Protect** reacts prematurely and cannot form a permanent seal.

The substrate temperature must be between + 5 °C and + 30 °C, the relative humidity at 30 % - 80 %.

APPLICATION

erstophob Marine Protect must be applied at an ambient temperature of at least + 5°C and a relative humidity of30 % - 80 %. Avoid direct sunlight!

Apply the coating in dry conditions and never in rain.

The coating is applied with an applicator. Any mistakes can be rectified within approx. 10 min of application.

After this the repellent effect of **erstophob Marine Protect** makes it impossible to apply another coat. The average coverage is ca 15 ml/m2 and this should not be significantly exceeded.

During application, only small quantities should be decanted from the original container into the application container. Residues of unused **erstophob Marine Protect** should not be returned from the application container tothe original container.

Traces of water in the applicator should also be avoided. Applicators dampened with water should not be used. If dirt appears on the applicators during coating, they should be replaced with clean applicators to avoid dirt entering the coating. The applicators cannot be reused once the coating has been applied. If the solution in the application container solidifies or a deposit forms, it can no longer be used.

Solutions that are no longer useable must be disposed of properly.

erstophob Marine Protect is dry-to-touch after about one hour.

The recommended curing conditions (until water resistant) are:

Room temperature:	8 – 12 hours
80 °C:	two hours
130 °C – 180 °C:	one hour

The coating is fully effective after 5 – 7 days' curing at room temperature. During this time, thetrain or tram should not be driven into a vehicle wash.

On metal surfaces such as aluminum, steel and stainless steel, curing at > 80°C is recommended to achieve optimum adhesion to the substrate.

SAFETY INSTRUCTIONS

The instructions on the accompanying Safety Data Sheet must always be followed.

CLEANING AND GRAFFITI REMOVAL

Surfaces coated with **erstophob Marine Protect** should be cleaned with cleaners in the pH range 3 – 12. Strong (mineral) acids or alkalis should be avoided and are also unnecessary as neutral cleaners are generally sufficient to clean vehicles coated with **erstophob Marine Protect**.

Graffiti should always be removed from the coated surfaces as quickly as possible. Conventional graffiti removers can be used.

TECHNICAL SERVICE

Our Application Department is available to answer technical questions on performance, use and chemical specifications.

We provide information and advice on application technologies and relevant regulations based upon our current knowledge and opinion.

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