

SEA 3000

Fire retardant cycle for incombustible substrates

Rev. February 2022

Colored coating cycle consisting of primer, base and top coat

Characteristics: Fire retardant coating cycle consisting of: one-component primer based on acrylic resins and zinc phosphate with excellent adhesion characteristics on properly prepared ferrous surfaces, galvanized sheet metal and aluminum; Sea 3000 two-component polyurethane base coat formulated with special solvent polyurethane resins; Sea 3000 Top two-component colored polyacrylic top coat.

Both the primer and the finish are formulated with specific reactive substances that, when subjected to the action of flame or the heat of a fire, reduce the spread of flame; in addition, the finish provides an appreciable aesthetic appearance along with the possibility of having a wide range of colors.

Applications: Specially designed and certified protective system for fire retardant treatment of class 0 non-combustible substrates according to the Marine Equipment Directive (MED) 2014/90/EU

Technical performance: the coating cycle is classified as:

"MED/3.18a Surface materials and floor coverings with low flame spread characteristics: (b) Painting Systems,"
The system can be used for painting any metal substrate ≥ 0.75 mm thick, such as bulkheads and ceilings.

Technical Data

Characteristics	PRIMER	BASE	TOPCOAT
Protective system:	AMOTHERM STEEL PRIMER WB	BASE SEA 3000	SEA 3000 TOP*
Components:	Single-component product	Dual-component	Dual-component
Colour:	White	White	White / coloured version on request
Gloss level:	5- 9	8- 12	55- 65
Density:	➤ 1.250 ± 0.05 g/cm ³	➤ 1,42 ± 0,05 g/cm ³ comp. "A" ➤ 0,92 ± 0,05 g/cm ³ comp. "B"	➤ 1,30 ± 0,1 g/cm ³ comp. "A" ➤ 0,92 ± 0,05 g/cm ³ comp. "B"
Test viscosity:	➤ 2000 ± 500 mPa s (BROOK)	➤ 4500 ± 500 s (BROOK) comp. "A" ➤ 62 ± 3 s (DIN 2) comp. "B"	➤ 4500 – 500 mPa s (BROOK) comp. "A" ➤ 62 ± 3 s (DIN 2) comp. "B"
Dry residue in weight:	➤ 55 ± 3%	➤ 75 ± 2% comp. "A" ➤ 37 ± 2 % comp. "B"	➤ 75 ± 2% comp. "A" ➤ 37 ± 2 % comp. "B"
Catalysis ratio:	--	5:1	2:1
Pot life	--	8 h	8 h
Drying time:	▪ dry to touch 1 h ▪ through-dry 24 hours	▪ dust dry 30' ▪ through-dry 12-24 hours	▪ dust dry 25' ▪ through-dry 24-48 hours
Storage:	at least 12 year in the original closed container at a temperature of >5°C AMOTHERM STEEL PRIMER WB protect from frost - store at temperatures > 10°C		
Packaging:	as per price list		

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* The technical data given above refer to the results obtained for the white version. The application characteristics of the product were measured under normal environmental conditions (temperature 20 °C and relative humidity of 60%) Application of different thicknesses and/or under different environmental conditions, could result in significant variations in the above technical characteristics

How to apply

Detailed information about the use of SEA 3000 at all operative stages in the life cycle of the product, can be found on the Safety Data Sheet (SDS). Further information and instructions for applying the protective system can be found in the USER MANUAL. The technical product documentation is available on the company website and can be downloaded at www.amonncolor.com.

A summary of the standard operating conditions for the correct application of this protective system is given below.

Surface preparation:

- New steel: sandblasting to SA 2^{1/2} blast class.
- Galvanized steel: the substrate to be treated must be thoroughly clean and dry; applications on galvanized steel surfaces are recommended to be thoroughly cleaned or lightly sanded to remove any oxide traces present.
- Already treated steel: in the case of surfaces with pre-existing anti-corrosive treatments, still consistent with the substrate, carry out light sanding with sandpaper, followed by thorough cleaning with suitable washing solvents; check compatibility and adhesion, before proceeding with the application of a new uniform layer of antirust.

Product preparation: Mix the product well before use. For BASE COAT SEA 3000 and SEA 3000 TOP, prepare the product, at the time of application, by combining the two components and shaking the mixture thoroughly before use; use the whole product within 8 hours of mixture formation.

Dilution: see next table.

Application: by spray, roller or brush.

The cycle to be used in applications is as follows:

- One coat of minimum 100 g/m² AMOTHERM STEEL PRIMER WB
- Apply BASE SEA 3000 with consumption of 150 g/m²
- After at least 12 hours, sand down with medium grain (220-240) sandpaper and apply a coat of min. 120 g/m² of AMOTHERM SEA 3000 SB TOP protective topcoat.

The product will adhere between coats if the over-painting times and sanding stages are respected. Using hot air during application speeds up hardening times.

Quantity to apply:

AMOTHERM STEEL PRIMER WB 100 g/m² dry film thickness 0.055 ± 0.010 mm

BASE SEA 3000 150 g/m² dry film thickness 0.065 ± 0.015 mm

SEA 3000 TOP 120 g/m² dry film thickness 0.070 ± 0.015 mm

The cycle can be applied to any metal substrate with thickness ≥ 0.75 mm

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Summary of application methods:
AMOTHERM STEEL PRIMER WB

METHOD	% dilution with WATER	pressure	nozzle
<i>Roller/Brush</i>	<i>0 - 5%</i>	---	---
<i>Air spray</i>	<i>0 - 5%</i>	<i>2.5 – 3.5 atm</i>	<i>1.8 – 2.1 mm</i>
<i>Airless spray*</i>	<i>0 - 5%</i>	<i>120 – 150 atm</i>	<i>0.013 - 0.015 inch</i>

BASE SEA 3000 - SEA 3000 TOP

METHOD	% dilution with polyurethane thinner (stufex 0001)	pressure	nozzle
<i>Roller/Brush</i>	<i>0 - 5%</i>	---	---
<i>Air spray</i>	<i>0 - 10%</i>	<i>2,5 – 3,5 atm</i>	<i>1.8 – 2.1 mm</i>
<i>Airless spray*</i>	<i>0 - 5%</i>	<i>120 – 150 atm</i>	<i>0.013 - 0.015 inch</i>

* Use an airless pump for spray application:

- Pneumatic pump with a compression ratio of 15:1
- Electric pump with motor power of at least 1.9 KW

Do not work at temperatures below 5°C and in rooms with relative humidity above 60%, ensure room ventilation to promote proper drying of the applied film. Do not apply in case of rain, wind, fog or high humidity or strong sunlight.

Note:

Apply only when the surface temperature is at least 3°C above the dew point.

Cleaning of tools:

- with water, immediately after use, for AMOTHERM STEEL PRIMER WB,
- with STUFEX 001 thinner or equivalent for polyurethane products, immediately after use for BASE SEA 3000 and SEA 3000 TOP

The instructions provided in this document represent the most recent state of the information, development and use of product. The application of the materials is out of our control and, therefore, we can only answer for the constant quality of the product supplied. This sheet cancels and replaces previous editions.