

TECHNICAL DATA SHEET

IGL COATINGS™ ECOCLEAR Aegis



Material no.

154328

Revision date

7.9.2023

Version

1.31

IGL COATINGS ECOCLEAR AEGIS

AN ANTI-CORROSION COATING SYSTEM FOR METAL AND ALLOY SURFACES.

Description

ecoclear AEGIS is a 2-component graphene-reinforced anti-corrosion clear coating system for metal and alloy surfaces. **ecoclear AEGIS** is a solvent-based high solids (85-90%) coating system with outstanding weathering resistance. The optimum mixing ratio of AE1 and AE2 is 6:1 by weight. Stir slowly until homogeneous before application.

Technical data

Property	Value
Pot-life (at 25°C)	Approx. 4 hours
Dry-to-touch (at 25°C)	Approx. 6 hours
Through drying (at 25°C)	Approx. 8 hours
Maximum wet thickness	50 µm
Coverage	25 g per sq. ft.
Service temperature	< 150 °C
VOC content	< 150 g/L

Substrates

Corrosion protection for alloy, concrete, metal, and wood surfaces.

General guidelines

- **ecoclear AEGIS** can be applied using a brush or a spray gun.
- Do not apply the product at temperatures <5°C. At low temperatures, the curing process will take longer.
- Provide adequate ventilation and fresh air during application.
- If possible, apply the product in a dust-free environment.
- **Caution: ecoclear AEGIS is flammable.**

REMINDER: Always test on an inconspicuous area first. Kindly contact your local IGL Coatings representative if you need advice.

Step 1: Cleaning the surface

- In order to permit sufficient chemical bonding of **ecoclear AEGIS** to the substrate, the surface must be carefully cleaned of all contaminants before the application.
- Grease can be removed using a degreaser. Rust present on the surface should be removed chemically or mechanically.
- Coat the cleaned surface immediately after cleaning to prevent any contamination.

Step 2: Painting process

- Mix AE2 into AE1 by following the ratio of **6:1 (AE1: AE2, by weight)**. Stir slowly to prevent bubble formation. Stir for at least 1 minute until homogenous. Adjust the viscosity of the mixture using the diluent if needed. **For application using air spray, please refer to the spraying guide.**
- Apply the coating onto the surface with proper painting techniques for the best finish.
- Allow the coating to dry to touch before applying the second layer (if needed).
- **Important Note: Wet coating can be removed with some diluent. If it has been allowed to harden for more than 8 hours, it will need to be polished off with an abrasive system or a paint stripper.**
- Air dry the coated surface after application for approximately 6 hours.

SUPPLEMENTARY DOCUMENT

IGL COATINGS™ ECOCLEAR Aegis



Material no.

154311

Revision date

08.09.2023

Version

1.01

IGL COATINGS ECOCLEAR AEGIS SPRAYING GUIDE

Description

This spraying guide is based on **IWATA W77-3G**

Spray gun specification

Specification	Value
Nozzle	2.5 mm
Feed	Gravity feed
Pattern width	13 in
CFM	11.5
Fluid output	485 ml/min

General guidelines

Step 2: Painting process

- Mix AE2 into AE1 by following the ratio of **8:1 (AE1: AE2)**. Stir slowly to prevent bubble formation. Add 5% *(by weight) diluent to the mixture. The actual amount of diluent needed will vary depending on the spray gun. Rule of thumb: If the paint spatters, diluent must be added.
- Pour the mixture into the feeder cup once ready.
- Adjust the air pressure to 3 bar (43 psi). Adjust the spray gun pattern adjusting knob (top) to open (3 turns, counting from minimum) fully. The fluid adjusting knob (bottom) is adjusted to 3 turns.
- It is recommended to spray a test panel before the actual application.
- Apply the paint with an even sweeping motion and keep the nozzle approximately 20-30 cm away from the surface.
- Adding diluent reduces the wet thickness of the coating. Additional layers might be needed to achieve the target thickness.

Safety and Handling

For your safety, toxicological data and information on property transportation, storage and use, please read the Safety Data Sheet (SDS) before using any **IGL Coatings products**. The SDS is available upon request via email from regulations@iglcoatings.com.

Disposal

Disposal of product residue in incompletely emptied bottles and contaminated PPE and cloths/tissues must comply with local regulations.

Storage

ecoclear AEGIS is storage-stable for at least 12 months in originally sealed containers.

Opened containers should be stored properly and used up as soon as possible.

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- After use, clean all equipment with cleaning solvent or thinner.

Resistance

Weathering	Good
Heat	Good up to 150°C dry heat
Solvent	Good to splash or spillage of common solvents
Chemicals	Good to splash or spillage of common chemicals
Immersion	Immersed up to 168 hours with no rusting or blistering
Hardness	63.5 (Shore D)

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- Pour the mixture into the feeder cup once ready.
- Adjust the pressure to 3 - 5 bar (43 - 72 psi). Adjust the spray gun pattern adjusting the knob (top) to fully open (3 turns, counting from minimum). The fluid adjusting knob (bottom) is adjusted to 3 turns.
- It is recommended to spray a test panel before the actual application.
- Apply the paint with an even sweeping motion and keep the nozzle approximately 20-30 cm away from the surface.
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