

Technical Data Sheet – Crystilium™ Clear Coat System

Description

Ensure long lasting gloss, excellent stain protection and an easy clean with the Crystilium™ clear coat system.

- Glossy, tough ceramic coating that protects underlying substrate against weathering and restores previously weathered surfaces and colours to a bright, high gloss appearance
- Crystilium can be applied quickly in or out of the water
- Coating will not dissolve, soften, or remove paint or decals that are part of substrate being coated
- High durability, strong permanent bond to surfaces. Coating is resistant to weathering, UV, freeze-thaw, high heat, corrosion and oxidation and protects underlying surface from these environments
- Cured coating is neither flammable nor combustible and will provide a degree of heat resistance to the underlying substrate
- Removal: Crystilium Clear Coat can be removed using our Clear Coat dissolver
- Polydimethylsiloxane (PDMS) Silicone free. No PDMS is used or added in the manufacture of Crystilium Pro or Crystilium Lite.

Crystilium Clear Coat Lite

Our lightest protective layer which is ideal for surfaces above the waterline such as superstructures. This high performance, marine grade coating ensures easy to clean, stain free surfaces for 1-2 years.

- Keeps original painted look for 1-2 years
- Lightest version of Crystilium Clear Coat, protects underlying substrate against weathering with a thinner layer that is easier to remove
- High performance, marine grade protection for super structure aesthetic coatings
- Quick application – Simply wipe on and wipe off

Crystilium Clear Coat Lite Plus

Formulated especially for areas of high UV exposure such as horizontal superstructure surfaces such as roofs. Same application as Lite with the same benefits, ensures stain free surfaces for 1-2 years.

Crystilium Clear Coat Pro

Highly transparent, thin protective layer which protects marine topcoat paints and gelcoat. It has been developed to be a professional use only, cost effective alternative for repainting that ensures long-lasting gloss and excellent protection against stains on high wear areas such as hulls.

- Avoid repaint...Renovate and protect
- Glossy, tough, marine grade coating that protects high wear surfaces for 2+ years
- Completely transparent
- Latest generation permanent clear coat
- Easy application: can be applied quickly in or out of the water
- Restores weathered surfaces and colours to a bright, high gloss appearance

Crystilium Clear Coat Dissolver

The removal gel for Crystilium Clear Coat. Designed to dissolve previously applied Crystilium Clear Coat to reveal the original substrate. Formulated to remove Crystilium Clear coat without damaging the underlying paint or gelcoat.

Coverage

Crystilium Clear Coat Pro:	75 m ² (807 ft ²) per litre – 1 coat*
Crystilium Clear Coat Lite Plus:	75 m ² (807 ft ²) per litre – 2 coats*
Crystilium Clear Coat Lite:	75 m ² (807 ft ²) per litre – 2 coats *
Crystilium Clear Coat Dissolver	5.5m ² (59 ft ²) per litre – 1 coat

***This may be reduced to below 60 m²/L on more absorbent matt and weathered surfaces.**

Recommended substrates

- Marine topside paint
- Polyurethanes
- Gelcoat
- Acrylics
- Epoxies
- Powder coatings
- All marine metals (stainless steel, aluminium, bronze)
- Nylon
- Polycarbonate
- Perspex
- Vinyl

<p>Technical data Crystilium Clear Coat Pro</p> <table style="width: 100%; border: none;"> <tr><td style="width: 30%;">Dry film thickness</td><td>8-10µm</td></tr> <tr><td>Appearance</td><td>Transparent mobile liquid with an ammoniacal odour</td></tr> <tr><td>Specific gravity</td><td>0.938</td></tr> <tr><td>Boiling point</td><td>195 °C (solvent)</td></tr> <tr><td>Volatile volume</td><td>51% (solvent)</td></tr> <tr><td>Evaporation rate</td><td>Slower than ether</td></tr> <tr><td>Vapour density</td><td>Heavier than air</td></tr> <tr><td>Solubility in water</td><td>Incompatible, hydrolyses</td></tr> <tr><td>Volatile Organic Compounds (Theoretical - as packaged)</td><td>510 g/L Emitted VOC (EU)</td></tr> <tr><td>Touch Dry at 23°C (73°F)</td><td>15-30 minutes</td></tr> <tr><td>Recoat at 23°C (73°F)</td><td>Once touch dry</td></tr> <tr><td>Rain ready</td><td>12 Hours</td></tr> <tr><td>Wash Ready</td><td>7 Days</td></tr> </table>	Dry film thickness	8-10µm	Appearance	Transparent mobile liquid with an ammoniacal odour	Specific gravity	0.938	Boiling point	195 °C (solvent)	Volatile volume	51% (solvent)	Evaporation rate	Slower than ether	Vapour density	Heavier than air	Solubility in water	Incompatible, hydrolyses	Volatile Organic Compounds (Theoretical - as packaged)	510 g/L Emitted VOC (EU)	Touch Dry at 23°C (73°F)	15-30 minutes	Recoat at 23°C (73°F)	Once touch dry	Rain ready	12 Hours	Wash Ready	7 Days	<p>Technical data Crystilium Clear Coat Lite</p> <table style="width: 100%; border: none;"> <tr><td style="width: 30%;">Dry film thickness</td><td>1-2µm</td></tr> <tr><td>Appearance</td><td>Transparent mobile liquid with an ammoniacal odour</td></tr> <tr><td>Specific gravity</td><td>0.954</td></tr> <tr><td>Boiling point</td><td>195 °C (solvent)</td></tr> <tr><td>Volatile volume</td><td>72%</td></tr> <tr><td>Evaporation rate</td><td>Slower than ether</td></tr> <tr><td>Vapour density</td><td>Heavier than air</td></tr> <tr><td>Solubility in water</td><td>Incompatible, hydrolyses</td></tr> <tr><td>Volatile Organic Compounds (Theoretical - as packaged)</td><td>694 g/L Emitted VOC (EU)</td></tr> <tr><td>Touch Dry at 23°C (73°F)</td><td>15-30 minutes</td></tr> <tr><td>Recoat at 23°C (73°F)</td><td>Once touch dry</td></tr> <tr><td>Rain ready</td><td>6 Hours</td></tr> <tr><td>Wash Ready</td><td>72 Hours</td></tr> </table>	Dry film thickness	1-2µm	Appearance	Transparent mobile liquid with an ammoniacal odour	Specific gravity	0.954	Boiling point	195 °C (solvent)	Volatile volume	72%	Evaporation rate	Slower than ether	Vapour density	Heavier than air	Solubility in water	Incompatible, hydrolyses	Volatile Organic Compounds (Theoretical - as packaged)	694 g/L Emitted VOC (EU)	Touch Dry at 23°C (73°F)	15-30 minutes	Recoat at 23°C (73°F)	Once touch dry	Rain ready	6 Hours	Wash Ready	72 Hours
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Method Statement – Crystilium™ Clear Coat System

Application of Crystilium Clear Coat Lite and Lite Plus

Surface Preparation¹

1. On Brand new paint and gelcoat wash with Crystilium Boat Wash, rinse with fresh water & dry thoroughly.
2. On slightly faded, streaked or watermarked surfaces, lightly buff with a compound to restore the shine, then wash with Crystilium Boat Wash, rinse with fresh water & dry thoroughly.
3. On dull and sun faded surfaces polish as required to restore the full shine, then wash with Crystilium Boat Wash, rinse with fresh water & dry thoroughly.
4. Dry with a cloth soaked in ethanol or denatured alcohol.

Application

1. Apply within the temperature range of 10°C to 30°C. Avoid application in strong wind, direct sunlight or where humidity exceeds 80% or where the substrate temperature does not exceed the dewpoint by at least 3°C.
2. Take a fresh microfibre suede cloth and dampen with Crystilium Clear Coat Lite, it should be slightly wet, but not dripping. Apply working horizontally, then vertically, for an even spread of product.
3. Using a clean microfiber cloth and wipe over the area removing the excess residue, until a uniform appearance is achieved, streak and rainbow free. See [Crystilium Lite application video](#).
4. After 30 minutes repeat this process applying a second coat and wiping off the excess as instructed above.
5. Allow 24 hours before washing. Do not use aggressive cleaners, you will not need them anymore.

Application of Crystilium Clear Coat Pro

Surface Preparation¹

For painted surfaces start at Step 1, for metal surfaces ensure they are prepared back to bare metal and free of contaminants then start at Step 3:

1. Using a 3M Tizact disc or similar attached to an orbital sander, remove surface contamination, imperfections and light scratches. Ensure disc is kept slightly wet. Depending on surface condition use a combination of 1000/3000 grit abrasive.
2. Using a fast-cutting compound on a compounding pad attached to an orbital sander, remove fine abrasive scratches. Follow with a fine cutting compound.
3. Wash with Crystilium Boat Wash.
4. Rinse with fresh water.
5. Dry with a cloth soaked in ethanol or denatured alcohol.

Application

1. Apply within the temperature range of 10°C to 30°C, do not apply in strong wind, direct sunlight or where humidity exceeds 80% or where the substrate temperature does not exceed the dewpoint by at least 3°C. Failure to adhere to these precautions will result in a coating that is lower in gloss and non-homogenous in aspect.
2. If applying to painted surfaces, ensure underlying paint is fully cured.
3. Mask off or otherwise protect adjacent surfaces that are not to be coated.
4. Apply the Crystilium Clear Coat Pro using a thin microfibre roller. Soak the roller with the coating so that it is moist but not dripping wet.
5. Coat one section at a time. Apply a coat that wets the surface in a striping motion with even strokes, taking care to overlap and not leave a dry edge.
6. Then tip off that section within 2-3 minutes, using a microfiber cloth fastened with adhesive tape or a clip to a brush, spatula or wiper blade wetted with Crystilium. See [Crystilium Pro application video](#).
7. The coating will flow out to a perfectly flat finish. Protect from dust and windblown detritus.
8. The coating is touch dry within 30 minutes and while hard dry in 3 hours at 23 °C, the coating will only attain its maximum state of cure after another 7 days. Do not immerse coated surfaces within 24 hours of application.
9. Apply as supplied, do not thin.
10. Do not pour used product back into original container.

At 20°C coating is dust dry in 2 hours at, resistant to solvent at 48 hours; full resistance is obtained when the coating has fully cured, at 20°C this requires one week. In a marine environment, we recommend a time to immersion of at least 24 hours on surfaces where the coating will regularly be in contact with water; e.g. areas just above the waterline.

Application of the Crystilium Clear Coat DissolverApplication

NOTE: Wear protective clothing, safety glasses or goggles and nitrile gloves while using product and do not allow the gel to contact skin. In case of skin contact wash the affected area with plenty of soap and water, then calcium gluconate gel.

1. Protect all glass surfaces from contact with clear coat dissolver and ensure easy access to a water supply.
2. Ensure the area previously coated with Crystilium is clean, free of any oily residue, and dry.
3. Using a brush or roller, paint a 1-2mm thick layer of Crystilium dissolver onto surface.
4. Leave for at least 2 hours and cover with plastic film at temperatures greater than 25°C. Do not leave for more than 18 hours.
5. Excess material may be wiped off with a cloth at this point.
6. Wash with fresh water, ensuring once more that product is not splashed onto skin.
7. If any areas of the original coating remain, these will be seen as the water will bead-up on them. These can be re-treated as per above.

Clean-up

- Crystilium Clear Coat: Clean tools/equipment used with Crystilium clearcoat with Xylene or acetone.
- Crystilium Clear Coat Dissolver: Clean tools/equipment used with Crystilium clearcoat Dissolver with water

Thoroughly review product label and Safety Data Sheet (SDS) for safety and cautions prior to using these products. Follow manufacturer's safety recommendations when using any solvent.

Disclaimer

While every precaution is taken to ensure that all information furnished in this method statement is as accurate, complete, and useful as possible, Greencorp Marine cannot assume responsibility nor incur any obligation resulting from the use of any materials, coatings, or methods specified herein.

This method statement does not attempt to address problems concerning safety associated with its use. The user of this method statement, as well as the user of all products or practices described herein, is responsible for instituting appropriate health and safety practices and for ensuring compliance with all governmental regulations.