

The EonCoat Difference

SAFETY

EONCOAT[™]
AUSTRALIA

FAQ		Explanation
<i>What is EonCoat?</i>	✓	EonCoat is a spray-applied industrial inorganic coating that prevents corrosion on carbon steel. It is a 100% inorganic coating that only works on carbon steel.
<i>Does EonCoat minimise chemical evaporation and flame spread during its application and use?</i>	✓	There is no chemical evaporation and flame spread with EonCoat.
<i>I heard that minimal eye protection is required when spraying EonCoat, is this correct?</i>	✓	Different sites and applicators have a variety of preferences. As the material is 100% non-toxic and has no solvents, similar to materials you would use to paint a house.
<i>I have also heard that dust masks are the only respiratory protection required when spraying EonCoat, is this correct?</i>	✓	Similar to above, different sites and facilities will mandate a variety of PPE. The only hazard is the atomization of solid particles (dust) which are inorganic and non-toxic the P3 dust mask would be the standard minimum recommendation.
<i>Is it potable water the only requirement for clean up?</i>	✓	The general recommendation is to use water. This does not have to be potable water. It is important to ensure the EonCoat material from the pump and lines is fully flushed as one component is acidic and should not be left in the pump after a job is complete. During the cleaning process, it is important to achieve turbulent flow. Turbulence is more important than the cleanliness of the water.

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<i>Is EonCoat water based?</i>	✓	Yes, EonCoat is a water-based application.
<i>Can I use EonCoat if there's rust present?</i>	✓	Yes, EonCoat can be applied over flash rusted surfaces.
<i>Does EonCoat provide any defence against UV?</i>	✓	Yes, EonCoat is completely inorganic. Inorganic materials (rocks) are not damaged by UV light.
<i>Does EonCoat perform in the seawater splash zone?</i>	✓	EonCoat will provide excellent anti-corrosion protection. It is recommended to apply a material barrier like Denso Seashield in the intertidal submerged zones. Tidal abrasion forces should be considered. EonCoat Rep will review options.
<i>Can EonCoat be used in humid conditions?</i>	✓	EonCoat can be applied in high humidity under moist condition (about 95% RH) As a guide, the relative humidity application range is 20-98%. At low humidity its important to prevent excessive water evaporation from the cement. Water misting of the substrate may be required to prevent cracking if the surface temperature or wind conditions are high, and if shrinkage cracks start to form.
<i>Can EonCoat be overcoated.</i>	✓	Yes ,Acrylic, polysiloxane or urethane products can be used over the EonCoat primer for colour option. This can add a benefit to the coating system performance. More environmentally friendly water based topcoats are being used globally with high success.
<i>Can I expect no interaction between EonCoat and other material surfaces</i>	✓	EonCoat will only react with surfaces that can oxidize. Overspray on polymer surfaces will not bond. EonCoat is designed specifically for Carbon Steel.
<i>Can EonCoat be easily removed?</i>	✓	Should an area of structural steel require any structural repair or modification in the future, EonCoat can simply be ground back to expose bare steel prior to welding. No toxins are released when EonCoat is ground or blasted.

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<i>Is EonCoat impact resistant?</i>	✓	Yes conforms to ASTM D 2794 (80 in. Lbs).
<i>As a ceramic coating, is EonCoat flexible?</i>	✓	Yes ASTM D 522 18% Elongation
<i>Will EonCoat provide sufficient adhesion performance?</i>	✓	Yes, conforms to ASTM D 4541 550 psi (3.79 MP) EonCoat chemically phosphates and passivates the carbon steel surface. The bond of the protective iron phosphate layer is chemical, and significantly stronger than any epoxy can produce. The ceramic layer is not susceptible to osmotic pressure because it is porous, so the typical correlation between bond strength and corrosion resistance does not apply.
<i>What is are the guidelines for topcoat applications?</i>	✓	Standard coating procedures for application to concrete apply.
<i>What is EonCoat's storage temperature range?</i>	✓	Minimum storage temperature range is 8°C and maximum 44°C. Do not store EonCoat in direct sunlight for a prolonged period of time
<i>What are the optimal conditions for EonCoat application?</i>	✓	Temperature: Surface: 10°C minimum 49°C maximum Material: 15°C minimum 35°C maximum Please refer to the product TDS for further information.
<i>Can EonCoat be applied over flash rust</i>	✓	Yes, it is preferred however it is important for applicators to understanding the difference between flash rust and other grades of rust (B, C, D). It is essential that the benefits of EonCoat are understood in the training and verification of competency process.

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<i>What measures are required to be assessed for EonCoat corrosion protection in an acidic environment?</i>	✓	pH testing of debris collected on horizontal surfaces on site needed to confirm pH upper/lower limits. pH readings below 4.5 will require EonCoat to be top coated with an appropriate barrier coating.
<i>What measures are required for coating success?</i>	✓	Education from training is the Key. Identifying the different types of rust surfaces is required as lack of identification can result in poor adhesion and early coating failure. This is fundamental to all coating protection strategies.
<i>I heard that you are not able to apply EonCoat to a surface if there is ANY sand, garnet or dust. Is this correct?</i>	✓	Inclusion of grit in the profile is a detriment to all coatings. It matters to EonCoat because if grit is embedded in a profile the acid will not get into that profile and alloy the metal. This will lead to corrosion in that pit which will eventually be stopped by the Ceramic in EonCoat leaching phosphate. Unlike other coatings, grit removal is easy for EonCoat – just pressure wash the substrate. The resulting flash rust won't matter.
<i>What are the surface cleaning recommendations when using EonCoat?</i>	✓	All coating application surfaces should be contaminant free. An environmentally friendly detergent or degreaser is typically sufficient for this process. Your EonCoat Australia representative can arrange supply of a recommended extra strength water-based degreaser.
<i>If there is any visible presence of flash rust, is it not permissible to coat the surface? Should the flash rusting be removed in such cases?</i>	✓	EonCoat is not hyper-sensitive to minute areas of imperfections. There is generally a reasonable tolerance level. However best practice is to always wash to remove loose particulates of corrosion product so that when EonCoat is applied it can chemically bond to the substrate to provide excellent longevity.

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<i>Can EonCoat be used in high ambient temperatures?</i>	✓	Yes, globally EonCoat has been applied in ambient temperatures in excess of 45°C. A water wash in front of the application has been successfully used to cool the steel down to an acceptable level for the short period of application. Once the chemical bond has happened which is extremely quick there are no issues with the temperature rising as long the ceramic is kept hydrated for the 15 - 20 minutes after application.
<i>Are there structural thickness restrictions when applying EonCoat?</i>	✓	There is no maximum thickness with EonCoat. With minimum practice the spray painter will be able to apply without any concerns of runs or sags.
<i>What happens if there any drips, sags or over thick areas occur?</i>	✓	EonCoat is a sandable coating. If there are runs or sags just sand it smooth the following day. A palm sander has proved a handy tool for this
<i>Will painters have difficulty completely washing out EonCoat from the applicator?</i>	✓	Clean up with water is fast and easy. The only problem we have seen is not adequately flushing the system. Learn more about cleaning a Graco G40 after using EonCoat .
<i>What are the guidelines around cleaning & flushing the spray equipment ?</i>	✓	Common practice is to flush at the gun from the whip end with the inline pressurised water line. This topic is covered in the training module. At the end of the shift flush the hoses with enough water flow to get turbulent flow. This thoroughly cleans the walls of the hose. Learn more about setting up a Graco G40 with EonCoat .
<i>The maximum storage temperature recommended is 44°C . Is a Cool Box required for storage?</i>	✓	No, we routinely store EonCoat in a warehouse where the temperature varies from 10°C to 40°C over time. If temperatures in your storage facility significantly exceed this on a frequent basis it would be good to consider air-conditioned space.

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<i>Can we get any case studies?</i>	✓	There are many. Please contact us about choosing ones relevant to your application.
<i>Is it correct that the surface temperature constraints are between 10°C and 49°C?</i>	✓	EonCoat has been sprayed outside of the recommended parameters, but the principles remain the same. The key concern on the lower temperature side is to ensure there is no ice on the substrate. On the higher temperature side, the challenge is to prevent shrinkage cracking caused by excessive evaporation of water from the coating before the reaction is complete. To address this, we cool the substrate with water before application if the temperature is too high. Additionally, if the water is evaporating too quickly, we mist the coating after application. EonCoat is a cement, so water management follows the same principles as any other cement. It is important to keep the surface damp until the cement cures, which typically occurs within 15 minutes for EonCoat.
<i>Have third-party adhesion tests been conducted?</i>	✓	Yes, you a third-party ASTM D4541 test has been conducted. See results on the Pull-off adhesion testing ASTM D4541 .
<i>Is training required and what is currently available?</i>	✓	Yes, EonCoat products must be applied by an EonCoat trained and endorsed applicator. There is currently online and in-person training available.

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FAQ		Explanation
<i>Will using EonCoat result in an improved cost/benefit ratio to my current applications? What are the benefits of switching to EonCoat?</i>	✓	The benefits are multi-faceted. Firstly, EonCoat application is quicker and safer. Equipment is inspected and returned to service significantly faster as there is no waiting for curing and ventilation time. Additionally, the longevity of the coating system is generally a factor of 2 to 3 times the service life when compared to conventional epoxy systems. Learn more about how the EonCoat curing process .
<i>Is there an Australian Warranty?</i>	✓	EonCoat has a global warranty.
<i>Where can I obtain more information about the EonCoat limited product warranty?</i>	✓	Please refer to the manufacturer's website to view the limited product warranty.

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SCHEDULING



FAQ		Explanation
<i>Can I expect to return to service faster with EonCoat?</i>	✓	Using EonCoat will allow for an application without time limits. This is a significant advantage from a contractor execution perspective and is commonly a primary driver for the selection of EonCoat.
<i>Can EonCoat deliver improved scheduling benefits?</i>	✓	Using EonCoat will result in will be quicker application. It is also safer for use in confined workspaces. QC inspection can be 100% completed within 1 hour of application (full cure).
<i>I heard that there's no maximum recoat window when using EonCoat, is that correct?</i>	✓	Yes, there is no maximum recoat window. The coating may need to be clean with water before recoating.

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