



# SAXON 250D

## DESCRIPTION

This is a two-component, polyamine-cured epoxy coating designed for demanding corrosion protection applications. It is a surface-tolerant coating that can be applied to properly prepared moist substrates and will continue to cure even when exposed to immersion conditions.

The product provides excellent abrasion resistance and is suitable for environments with very high corrosivity, including splash zone and tidal zone areas. It may be used as a primer, intermediate coat, finish coat, or as a single-coat system in both atmospheric and immersed service conditions. It also offers excellent resistance to cathodic disbandment, making it suitable for structures protected by cathodic protection systems. The coating is compatible with properly prepared carbon steel, galvanized steel, stainless steel, aluminum, and concrete substrates, providing strong adhesion and long-term protective performance across a wide range of industrial and marine applications.

Suitable for **structural steel and piping** exposed to highly corrosive environments, including areas classified as **very high corrosivity** and **immersion service**.

Recommended for demanding industrial and marine applications such as:

### MAIN PROPERTIES

- Offshore structures and platforms
- Refineries and petrochemical facilities
- Power generation plants
- Bridges and infrastructure projects
- Commercial and industrial buildings
- Mining equipment and machinery
- General structural steelwork and pipework

Particularly well suited for areas requiring **high mechanical strength**, abrasion resistance, and long-term durability, such as **splash zones, tidal zones, and other areas exposed to frequent wet/dry cycling**. Designed to provide reliable corrosion protection in severe service environments where steel is exposed to moisture, salt, chemicals, impact, or mechanical wear. Compatible with **cathodic protection systems**, making it suitable for immersed or partially immersed steel structures protected by sacrificial anode or impressed current systems.

### COLOUR AND PRODUCT PRESENTATION

**Colour range** See Saxon Colour Chart (other colours available on request)  
**Size** 10 litres – 20 litres

### MAIN PROPERTIES

PREPARED MIXED PRODUCT	DETAILS
Application	Roller and brush and Spray gun/machine for product application.
Touch Dry	1 to 5 hours depending on ambient conditions.
Recoatable	2 hours to 24 hours, drying times will be significantly longer in cold conditions.
Coverage	5 m <sup>2</sup> per litre for 200 µm DFT 2 m <sup>2</sup> per litre for 500 µm DFT





PREPARED MIXED PRODUCT	DETAILS
	This numbers could be lower on highly porous surfaces.
Thinning	The amount of thinner added should not exceed 10% by volume, unless otherwise stated in the product's Technical Data Sheet.
Cleaning	Clean equipment immediately after use with thinner.
Colours	White (other colours available on request).
Shelf Life	Base: 24 months: if correctly stored to manufacturer's guidelines. Activator: 24 months: if correctly stored to manufacturer's guidelines.
Fully cured	10 days at 20°C
DFT	200 to 500 µm depending on system required.
Volume of Solids	85%

CURING TIME FOR DFT UP TO 500 µm		
Substrate temperature	Dry to touch	Fully cure
5°C (41°F)	12 hours	14 days
10°C (50°F)	8 hours	12 days
20°C (68°F)	6 hours	10 days
30°C (86°F)	3 hours	5 days
40°C (104°F)	1 hour	2 days

- Drying and curing times are based on controlled conditions, with stable temperatures and relative humidity below **85%**, measured at the average dry film thickness recommended for the product.
- Application at excessive dry film thickness, or the addition of thinner, may extend the drying and curing times and should be taken into consideration before overcoating or exposing the coating to service conditions.
- When applied to piles, jetties, or other structures located in tidal or splash zone areas, the coating may be immersed after approximately **1 hour**, provided the application conditions and film formation are adequate.
- Early immersion may cause temporary whitening or discoloration of the surface, especially on darker colors. However, this visual effect does not reduce the corrosion protection or overall performance of the coating.
- **Surface dry / touch dry** refers to the stage where the coating surface can be lightly touched without leaving a fingerprint, impression, or tacky residue.

OVERCOATING INTERVAL FOR DFT up to 500 µm						
Product	Interval	5°C (41°F)	10°C (50°F)	20°C (68°F)	30°C (86°F)	40°C (104°F)
Saxon 250D	Minimum	24 hours	12 hours	10 hours	6 hours	2 hours

### LIMITATIONS

During application and curing, the substrate temperature must be maintained above 5 °C (41 °F) and





at least 3°C (5 °F) above the dew point to prevent condensation. The product shall be mixed by volume at a ratio of 75:25 (base to activator), equivalent to 3:1. For proper application, the paint temperature should preferably exceed 20° C (68° F). Thorough mechanical mixing of the base and activator is essential.

Filters must be removed from the spray equipment prior to application.

Note: Do not use if the substrate is above 180 degrees Fahrenheit.

## PREPARATION

Proper surface preparation is essential to achieve optimum coating performance and long-term durability. Before application, all substrates shall be structurally sound, clean, dry, and free from oil, grease, dust, laitance, loose material, corrosion products, or any other contaminants that may impair adhesion.

Steel surfaces shall be abrasive blast cleaned to a minimum standard of **ISO 8501-1 Sa 2½ (SSPC-SP10)**, achieving an angular surface profile of approximately **75–100 µm (3.0–4.0 mils)**. Concrete substrates shall be prepared by abrasive blast cleaning or other suitable mechanical methods to completely remove laitance and provide a clean, open surface suitable for coating application. Where the product is applied over an approved primer system, the primed surface must be fully cured, clean, dry, and free from contamination prior to overcoating.

For concrete applications, the substrate moisture content shall not exceed **4%**, as determined by the carbide method. During both application and curing, the substrate temperature must be maintained above **5°C (41°F)** and remain at least **3°C (5°F)** above the measured dew point to prevent condensation and ensure proper coating cure and adhesion. Environmental conditions, including ambient temperature, substrate temperature, relative humidity, and dew point, should be continuously monitored throughout the application process to ensure compliance with the coating manufacturer's recommendations.

### Application

- Due to its high density and aggregate content, the sprayable polymer mortar requires a robust delivery system capable of continuously transferring the mixed material from the mixing vessel to the spray gun.
- For optimum material flow and consistent application, hoses with an internal diameter of **19–25 mm (¾–1 inch)** are recommended.
- To prevent material segregation and ensure uniform pumping, hose lengths should be kept to the minimum practical distance, with smooth routing and no restrictions, sharp bends, or blockages. An undersized or obstructed hose may cause the resin to separate from the aggregate, resulting in poor material flow, equipment blockages, and dry, unpumpable mortar remaining in the line.

## COATING SYSTEM

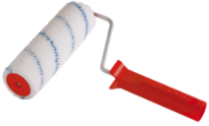




## APPLICATION

Stir well before and during use.

## ROLLER



The product may be applied by roller directly from the container, ensuring the roller sleeve is fully loaded with material before application. Apply the coating in a controlled and systematic manner, focusing only on the affected areas, welds, edges, corners, bolts, seams, or other localized sections requiring additional protection. Work the material evenly into the surface to achieve full coverage and proper film build, blending the repair area into the surrounding coating while the material remains wet. Maintain a manageable wet edge during application to avoid visible lap marks and ensure a uniform finish.

## BRUSH



The product may be applied by brush directly from the container. Before use, ensure the brush is clean and free from dust, loose bristles, or any contamination that could affect the coating finish. Load the brush by dipping up to approximately half the length of the bristles into the product, then gently tap off any excess material against the side of the container without wiping the brush aggressively. Apply the coating in a controlled and even manner, concentrating on localized areas such as welds, edges, corners, bolts, seams, or damaged sections requiring additional protection. Avoid excessive pressure during application; allow the material to flow from the brush to achieve proper coverage, film build, and adhesion. Blend the repaired or striped area into the surrounding coating while the material remains wet to obtain a uniform finish.

## SPRAY



For airless spray application, use equipment capable of delivering a uniform spray pattern and maintaining the required pressure throughout the application. As general guiding data, use a nozzle tip size of **0.021–0.027 in / 21–27 thou**, with a minimum nozzle pressure of **170 bar / 2,500 psi**.

An approximate nozzle orifice of **0.53 mm / 0.021 in** may be used as a starting point. At a paint temperature of **20°C / 68°F**, the recommended minimum nozzle pressure is **28.0 MPa / 280 bar / 4,061 psi**. At **30°C / 86°F**, the minimum recommended nozzle pressure is **22.0 MPa / 220 bar / 3,191 psi**.

Alternative equipment, such as low-pressure pumps, displacement feed pumps, or pressure vessel systems, may be used depending on the required finish, film build, viscosity, and site conditions, provided the material is applied evenly and the correct nozzle pressure is maintained.

For low-pressure or pressure vessel application, use a nozzle orifice of **6.5–10.0 mm / 0.256–0.394 in**, preferably with internal mix atomization, and a nozzle pressure of **0.4–0.6 MPa / 4–6 bar / 58–87 psi**.

For displacement feed pumps, such as Quick Spray Carousel, MAI 2 Pump Pictor, Graco T-Max 506/675, BPM 6 screw pump, or equivalent, use a nozzle





orifice of **4.0–5.0 mm / 0.157–0.197 in** and a nozzle pressure of **0.4–0.6 MPa / 4–6 bar / 58–87 psi**.

Before spraying, mask all areas not intended to be coated. Apply from the upper sections downward using smooth, overlapping passes while maintaining a consistent wet edge and spray distance. For larger surfaces, use a systematic spray pattern or crosshatch method to achieve uniform film build and avoid missed areas, dry spray, or excessive build-up. Check and clean spray tips, nozzles, hoses, and equipment regularly to prevent blockage and maintain a consistent spray pattern.

**Other spray equipment or application methods may be suitable depending on site conditions; however, Saxon Technical Support should be consulted when alternative equipment is proposed.**

## CLEANING

Return excess material/paint to container. Wash and clean using solvents or thinner immediately after use. All application tools and spray equipment should be cleaned thoroughly immediately after use to prevent material build-up or curing inside the system. Any mixed coating remaining inside the spray unit, hoses, gun, or related equipment must be flushed out before the product reaches the end of its pot life.

## HEALTH AND SAFETY RECOMMENDATIONS

Please refer to the Safety, Health and Environmental Information on the container. When preparing the surfaces avoid the inhalation of dust and/or metal particles. Wear a suitable facemask and recommended safety personal protection. Material Safety Data Sheets for this is available freely available at Saxon Paints website.

## STORAGE

Store in secure dry conditions. Keep out of reach of children. Containers should be kept closed during storage. Do not empty into drains, water rivers or access routes to septic drums.

For further information contact Saxon Paints

## GENERAL INFORMATION

Apply all products in accordance with BS 6150: 2006 Code of practice for painting of buildings and BS 8000: Part 12: 1989 Code of practice for decorative wallcoverings and painting.

Every care is taken to ensure that all information provided on this Technical Data Sheet is accurate. Results cannot be guaranteed by the manufacturer as it has no control over the conditions under which its products are applied.





SAXON PAINTS.

For help or more information contact Saxon Paints or visit our website at [www.saxonpaints.com](http://www.saxonpaints.com) Before using this product please ensure you have the latest information. The information is correct at date of issue July 2020

## WARRANTY

SAXON PAINTS warrant its title to the product, that the quality of the product conforms to Saxon Paints' specifications for such product in effect at the time of manufacture and that the product shall be delivered free of the rightful claim of any third person for infringement of any patent covering the product. This product is for professional use only. The applicators and operators shall be trained, experienced and have the capability and equipment to mix/stir and apply the paints correctly and according to Saxon Paints' technical documentation. Applicators and operators shall use appropriate personal protection equipment when using this product. This guideline is given based on the current knowledge of the product. These are the only warranties that Saxon Paints makes and all other express or implied warranties, under statute or arising otherwise in law, from a course of dealing or usage of trade, including without limitation, any other warranty of fitness for a particular purpose or use, are disclaimed by Saxon Paints. Any claim under this warranty must be made by Buyer to Saxon Paints in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life of the product, or one year from the date of the delivery of the product to the Buyer, whichever is earlier. Buyer's failure to notify Saxon Paints of such non-conformance as required herein shall bar Buyer from recovery under this warranty Any suggested deviation to suit the site conditions shall be forwarded to the responsible Saxon Paints' representative for approval before commencing the work.

## LIMITATIONS OF LIABILITY

The information in this document is given to the best of Saxon Paints' knowledge. The information in this sheet is intended for guidance only and is based upon laboratory tests that Saxon Paints' believes to be reliable. Saxon Paints' products are considered as semi-finished goods and as such, products are often used under conditions beyond Saxon Paints' control like the quality or condition of the substrate, or the many factors affecting the use and application of the product. The product and related information are designed for users having the requisite knowledge and industrial skills in the industry and it is the end-user's responsibility to determine the suitability of the product for its own particular use and it shall be deemed that Buyer has done so, as its sole discretion and risk. Saxon Paints' does not accept any liability arising from any loss, injury or damage resulting from such use or the contents of this information. Variations in the application environment, changes in procedures of use, or extrapolation of data may cause unsatisfactory results. Minor product variations may be implemented to comply with local requirements. Users should always consult Saxon Paints' for specific guidance on the general suitability of this product for their needs and specific application practices. If there is any inconsistency between different language issues of this document, the English (United Kingdom) version will prevail

