

Epoxy 151 UW

Solvent free under water curable epoxy coating

A two component, surface tolerant, solvent free, amine cured epoxy coating.

Intended Uses:

UW – Under Water curable, Epoxy 151 UW is completely unaffected by humidity in surface or ambient conditions and will cure in the presence of water.

A high-performance solvent free epoxy coating designed to provide long-term corrosion protection to steel & concrete in immersion conditions. Suitable for use with cathodic protection.

Used for the lining of tanks, vessels, pipelines containing drinking water, raw water, and sea water.

Used as a make good / repair coating for existing epoxy systems as fusion bonded epoxy, solvent free epoxies, or solvent based epoxies. Used in-situ for weld repairs and emergency repairs inside and outside pipelines, valves, gates, pumps, and any equipment already submerged or to be submerged.

Certified for contact with Potable Water / Drinking Water.

Properties:

- Solvent free, no odour.
- Conveniently packaged in small pre-measured repair squish packs or in 1 & 4.5Lt kits.
- Outstanding flow and levelling properties with brush application.
- High slip surface for low friction surfaces.
- Excellent flexibility and impact resistance.
- Excellent long-term corrosion resistance under immersion conditions.
- Used as a high-quality lining for tanks and pipes, applied directly onto suitably prepared steel surfaces in single or multi-coat applications.
- Surface tolerant, applied to clean and mechanically prepared surfaces.
- Unaffected by high relative humidity or surface moisture.
- Has provided good service in immersion conditions for more than 25 years.
- Conforms to SANS 1217:2011 for Drinking Water.

Technical Data

Colour	Water blue, light grey, white and dark blue
Finish	Gloss
Density	1.55 Kg/ Litre
Volume Solids	100%
Mix Ratio (Volume)	2 : 1
Activator	Epoxy Activator 151 UW
Typical Film Thickness	300 – 600µm DFT depending on system
Theoretical Coverage	2 m ² / Litre @ 500µm DFT, allow for loss factors
Method of Application	Brush, roller, or spray
Number of Coats	Two coats should be applied to achieve typical DFT and a pinhole free coating
Induction Period	Not required
Temperature Resistance	Wet immersion – 65°C Dry continuous – 80°C Intermittent repairs – 105°C

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Whilst we endeavour to ensure that all advice we give about the product is correct, the information given in this data sheet is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so entirely at his own risk. As conditions of use, method of application and suitability of the substrate prior to painting are beyond our control, no guarantee is implied by the recommendations contained herein. We therefore do not accept any liability whatsoever or howsoever arising from the performance of this product or for any loss or damage arising out of the use of this product. The information contained in this sheet is liable to modification from time to time in the light of experience and ongoing product development programmes. It is the user's responsibility to ensure that this sheet is current prior to using the product

Issue Date:
10/11/2016

Drying Information:

	0°C	5°C	15°C	25°C	40°C	45°C
Touch Dry	-	-	-	6 hrs	-	-
Hard Dry	-	-	-	16 hrs	-	-
Overcoating Data – See Limitations						
Substrate Temp.	0°C	5°C	15°C	25°C	40°C	45°C
Minimum	-	-	-	8 hrs	-	-
Maximum	-	-	-	24 hrs	-	-

Note: A curing temperature below 10°C is not recommended, adequate ventilation should be maintained during application and curing.

Certifications:

Epoxy 151 UW Fast has the following approvals:

- SANS 1217:2011 – Conforms with the requirements for drinking water.

Consult a Specialized Coating Systems technical representative for details.

Surface Preparation:

Abrasive Blast Cleaning and Mechanical Preparation

All surfaces to be coated must be dry, clean, and free from contamination. This product must only be applied to surfaces prepared by abrasive blast cleaning to Sa 2½ in accordance with International Standard ISO 8501:2007 and SSPC-SP10. A sharp angular profile of 75 – 100 microns is recommended.

Epoxy 151 UW must be applied before oxidation occurs. If oxidation does occur the entire oxidised area should be re-blasted to the standard specified above. Surface defects revealed by the blast cleaning process should be ground, filled and treated in the appropriate manner.

In working areas where solvents are allowed, surfaces may be primed with Epoxy Holding Primer at 15 – 25 microns DFT before oxidation occurs.

Concrete

Remove all dirt, oils, grease etc. and any loose material. All laitance should be removed by light abrasive blasting. Holes in concrete should be filled with an approved filler.

Application:

Mixing	Material is supplied in two containers as a kit. Always mix a complete kit in the quantities supplied. Once mixed the product should be used within the pot life specified Stir the base component well with a flat-bottomed paddle or mechanical mixer until product is uniform. Continue stirring and add the entire contents of the activator container. Continue stirring until the mixture is homogeneous. Transfer the mixed contents to a clean container and continue to mix with a clean mixer to avoid any contamination by unmixed material. Ensure that just sufficient material is mixed so that the product can be applied within its use-able life. The temperature of the mixed product should preferably be above 5°C. Higher temperatures result in reduced sag resistance and faster cure. No thinners should be added to this product
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Mix Ratio	2 part(s) base : 1 part(s) activator by volume
Pot Life	40 minutes @ 25°C
Brush/Roller	Thick nap nylon roller
Airless Spray	Tip range 21-31 Thou. Pressure at the tip should not be less than 150 bar (2176 PSI)
Thinner	Not required (Temperature can be used to control viscosity)
Cleaner	SA65 Thinner (For dry paint and equipment)
Work Stoppage	Do not allow material to remain in spray equipment after use, thoroughly flush and clean all equipment with SA65 Thinner . Once the kit has been mixed, they should not be re-sealed and it is advised that of prolonged stoppages, work recommences with freshly mixed units.
Clean Up	Clean all equipment immediately after use with SA65 Thinner . It is advisable to periodically flush out spraying equipment during the course of the working day. Frequency of cleaning is dependant of on the amount sprayed, temperature and elapsed time. Work strictly in accordance with the specified pot life of the material.

Environment:

	Surface Temperature	Ambient Temperature	Relative Humidity
Minimum	5°C*	5°C	No lower limit
Maximum	60°C*	45°C	100%

* Higher temperatures result in reduced sag resistance and faster cure.

Limitations:

- Overcoating information is given for guidance only and is subject to local climate and environmental conditions. Consult a Specialized Coating Systems representative for specific recommendations.
- Unmixed material (in closed containers) should be maintained in protected storage in accordance with information given in the STORAGE section of this data sheet.
- Technical and application data herein is for the purpose of establishing a general guideline of the coating application procedures.
- Test performance results were obtained in a controlled laboratory environment and Specialized Coating Systems makes no claim that the exhibited published test results, or any other tests, accurately represent results found in all field environments. As application, environmental and design factors can vary, due care should be exercised in the selection and verification of the performance and use of the coating.
- This product cannot be applied to underwater surfaces while under cathodic protection. Switch off the cathodic current and wait 48 hours for the surfaces to de-polarize.
- This product will chalk on the surface when exposed to sunlight.

Pack Size:

- 1 & 4.5 Litre.
- 5 x 200ml squish packs.
- 0.45 & 0.9 Litre cartridges.

Storage:

- Shelf Life: 18 months minimum at 25°C from date of manufacture. Subject to inspection thereafter.
- Store in dry conditions out of direct sunlight, away from sources of heat or ignition.

Precautions:

For complete safety and handling information please refer to the appropriate Safety Data Sheets prior to using this product.

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