Corrosion Chemistry

Technical Data Sheet

XQ30280109

QED AC Primer™

Water dispersed zero VOC anti-corrosion primer for steel

Product Description

QED AC Primer is a water dispersed epoxy based anti-corrosion primer for use with a wide range of top coats.

Advantages

- Excellent corrosion resistance
- Water dispersed
- Zero VOC
- Enhances bond
- Compatible with a wide range of top coats
- Long pot life
- No need to use full packs

Laboratory Test Data

Property	Typical Results
Volume solids	60%
Specific gravity	1.05 ± 0.05
Bond to steel (ASTM D4541)	>5 MPa (900 psi)
Flexibility (BS 3900 E11)	Pass
Humidity resistance (ASTM D2247)	Unaffected 500h
Salt fog resistance (ASTM B117)	Unaffected 2,000h
Impact resistance (ASTM D2794)	Pass

Application Properties

Pot life	3 hours at 30°C (86°F)
Touch dry	6 hours at 30°C (86°F)
Recoat time	6 to 24 hours at 30°C (86°F)
Mix ratio	1A:4B by volume
Recommended film thickness	Wet: 100 microns (4 mils) Dry: 60 microns (2.5 mils)

Theoretical Coverage

10m² per liter (110ft² per quart).

Actual coverage will depend on wastage and surface profile and can be up to 30% or more higher than theoretical coverage.

Packaging

1, 5 and 15 liter packs
1 quart and 1 gallon packs - USA.

Shelf Life

18 months when stored below 30°C (86°F) under shade in a dry environment.

Application Guidelines

Epoxy coating systems should be applied by experienced coating crews. QED Chemicals Limited provides detailed method statements on all its products for use in various applications. These must be referred to prior to starting work. The information below is a summary intended for guidance only.

Surface Preparation

All oil and grease must be removed using a suitable cleaner or solvent before starting surface preparation.

All loose rust, mill scale and loosely adherent coatings must be removed. Surfaces that can be abrasive blast cleaned should be prepared to a minimum standard of SA 2.5 i.e. bright steel.

Where abrasive blast cleaning is not feasible then the following methods of surface preparation should be used: high pressure water jetting, mechanical wire brushing or grinding to achieve a minimum standard of SA2.

Whichever surface preparation method is used it is essential that sufficient profile is achieved to ensure a good mechanical bond to the substrate.

In salt laden environments and on badly pitted substrates, high pressure water blasting is the preferred preparation method of preparation in order to ensure the complete removal of chlorides. When mechanical cleaning and wire brushing are used, special attention must wire be paid to any pitted areas to remove all loosely adherent rust and corrosion and expose a sound substrate.

Mixing

Mix QED AC Primer using the following technique.
Mix or stir the base 'Part A' to re-disperse any material that may have settled during transportation and storage. Immediately after add the hardener 'Part B' into the base 'Part A' and mix using a slow speed drill (500 rpm) with an QED Coating Mixer Paddle for 3 minutes or until both components have fully dispersed and are uniform in color. Be sure to rotate the mixer throughout the drum.

Application
Apply a single coat of 100 micron (4mils) wet film thickness using brush, roller or airless spray. When using airless spray, tip size should be 0.015" to 0.0018" at a pressure of 2200psi. Allow to dry before over coating. Ensure that no ponding of the primer occurs and that it is not applied too thick. Recoat after 6 to 24 hours at 30°C (86°F). If the primer is left to dry for more than 24 hours the surface will have to be re-primed. Clean equipment using QED Solvent.

Limitations
Will not accommodate movement cracks.
Do not apply below 5°C (41°F).
Do not apply when the relative humidity exceeds 90%
Do not apply when or the surface temperature is less than 3°C (37°F) above the dew point
Avoid excessive application.
Avoid skin contact.
Do not discard into the water system.

Health and Safety
This product is for industrial use only by trained operatives. It is potentially hazardous if not used correctly. Please refer to the Material Safety Data Sheet (MSDS) prior to the purchase and use of this product. The MSDS can be obtained via our website www.xqglobal.com

Authorized Technical Specialist
Please note that only QED Authorized Technical Specialists ('ATSs') are permitted to change any of the information in this data sheet or to provide written recommendations concerning the use of this product. Visit www.xqglobal.com for a full list of QED ATSs.

Datasheet Validity
QED makes modifications to its product datasheets on a continuous basis. Please check the datasheet update section on www.xqglobal.com to ensure you have the slatest version.

Warranties
QED Chemicals Limited supplies products that comply with the properties shown on the current datasheets. In the unlikely event that products supplied are proved not to comply with these properties, then we will replace the non-compliant product or refund the purchase price.
QED Chemicals Limited does not warrant or guarantee the installation of the products as it does not have control of the installation or end use of the products. Any suspected defects must be reported to QED Chemicals Limited in writing within five working days of being detected. QED Chemicals Limited **makes no warranty as to merchantability or fitness for a particular purpose and this warranty is in lieu of all other warranties express or implied.** QED Chemicals Limited shall not be liable for damages of any sort including remote or consequential damages, down time, or delay.

QED Chemicals Limited
Broad Quay House
5th Floor
Prince Street
Bristol, UK
BS1 4DJ

T: +44 (0) 117 9758 604
F: +44 (0) 117 9058 800
E: uk@xqglobal.com

.