



TECHNICAL DATA SHEET – DFENSE BLOK SURFACE WETTING AGENT

Revised: 05/2018

PRODUCT INFORMATION

STOCK NO.:

PACKAGE SIZE: 1lb (450g)

DESCRIPTION

Thixotropic gel that improves final adhesion for the DFence Blok product.

RECOMMENDED APPLICATIONS

- Can be overcoated directly after application
- Non sagging

PRODUCT DATA

TYPICAL PHYSICAL PROPERTIES

COLOUR	Orange
MIX RATIO BY VOLUME	Resin 2: Hardener 1
MIX RATIO BY WEIGHT	Resin 100: Hardener 45
% SOLIDS BY VOLUME	100
POT LIFE AT 25°C / MINUTES	12-15
SPECIFIC VOLUME CC/KG	892
SPECIFIC GRAVITY	1.12
TEMPERATURE RESISTANCE / °C	150°C
COVERAGE	2.65m ² /Kg @ 300microns
CURED HARDNESS / SHORE D	71
ADHESIVE TENSILE SHEAR / MPA	18
COMPRESSIVE STRENGTH MPA	34
CURE TIME	16 Hours
FUNCTIONAL CURE TIME / HOURS	4-5 Hours
OVERCOAT TIME / HOURS	0-45 Minutes
MIXED VISCOSITY / CPS	Thixotropic Gel

CHEMICAL RESISTANCE - 7 DAYS ROOM TEMPERATURE CURE (30 DAYS)
- TESTING CARRIED OUT 30 DAYS IMMERSION AT 21°C

	POOR	FAIR	VERY GOOD	EXCELLENT
AMMONIA				•
1,1,1-TRICHLOROETHYLENE			•	
METHANOL	•			
GASOLINE (UNLEADED)		•		
HYDROCHLORIC ACID 10%			•	
METHYL ETHYL KETONE (MEK)	•			
PHOSPHORIC ACID 10%		•		
NITRIC ACID 10%		•		
SODIUM HYDROXIDE 50%				•
SULPHURIC ACID 10%			•	
TOLUENE				•
TRISODIUM PHOSPHATE			•	

Excellent = +/- 1% weight change, Very Good = +/- 1-10% weight change, Fair = +/- 10-20% weight change, Poor = > 20% weight change

APPLICATION INFORMATION

CURE

A 300 micron thick coating of DFense Blok Surface Wetting Agent will harden at 25°C in 4-5 hours. The material will be fully cured in 16 hours. It will continue to cure beneath the DFense Blok product when applied directly after Surface Wetting Agent application resulting in maximum performance after 16 hours.

SURFACE PREPARATION

Proper surface preparation is essential to a successful application. The following procedures should be considered:

- All surfaces must be dry, clean and with a suitable profile to facilitate bonding to the substrate.
- If surface is oily or greasy use Devcon Fast Cleaner 2000 Spray/Cleaner Blend 300 to degrease the surface.
- Remove any existing paint, rust or other contamination from the surface by abrasive blasting or other mechanical techniques. Further reference can be made here to the Devcon Metal filled user guide.
- Aluminium repairs: Oxidation of aluminium surfaces will reduce the adhesion of an epoxy to a surface. This film must be removed before repairing the surface, by mechanical means such as grit-blasting, abrading or chemical means.
- Provide a "profile" on the metal surface by roughening the surface. This should be done ideally by grit blasting (8-40 mesh grit), or by grinding with a coarse wheel or abrasive disc pad. An abrasive disc may be used provided white metal is revealed. Do not 'feather edge' epoxy materials. Epoxy material must be 'locked in' by defined edges and a good 3-5 mil profile.

- Metal that has been handling sea water or other salt solutions should be grit blasted and high pressure water blasted and left overnight to allow any salts in the metal to 'sweat' to the surface. Repeat blasting may be required to 'sweat out' all the soluble salts. A test for chloride contamination should be performed prior to any epoxy application. The maximum soluble salts left on the substrate should be no more than 40 ppm (parts per million).
- Chemical cleaning with Devcon Fast Cleaner 2000 Spray/Cleaner Blend 300 should follow all abrasive preparation. This will help to remove all traces of sandblasting, grit, oil, grease, dust or other foreign substances.
- Under cold working conditions, heating the repair area to 38°-43° C immediately before applying any of Devcon Epoxies is recommended. This procedure dries off any moisture, contamination or solvents and assists the epoxy in achieving maximum adhesion to the substrate.
- Always try to make the repair as soon as possible after cleaning the substrate, to avoid oxidation or flash rusting. If this is not practical, a general application of FL-10 Primer will keep metal surfaces from flash rusting.

ITW PERFORMANCE POLYMERS

MIXING

Add the hardener to the resin then mix thoroughly using a suitable mixing paddle or suitable size jiffy type mixer. Mix in such a fashion that the material is thoroughly dispersed until homogenous.

APPLICATION

Spread the material over the prepared surface with a putty knife, spatula or stiff brush pressing firmly into all cracks and voids to ensure maximum surface contact and avoid trapping air. A film of at least 300 microns is recommended and application to vertical and overhead surfaces is possible without dripping.

Either directly after application or within 45 minutes, depending on temperature, the DFence Blok should be applied. If this window is exceeded and the Surface Wetting Agent has become firm then a further coat should be applied prior to the DFence Blok.

SHELF LIFE & STORAGE

A shelf life of 3 years from date of manufacture can be expected when stored at room temperature (22°C) in their original containers.

PRECAUTION

For complete safety and handling information, please refer to Material Safety Data Sheets (MSDS) prior to using this product.

WARRANTY

ITW Performance Polymers will replace any material found to be defective. As storage, handling and application of this material is beyond our control we can accept no liability for the results obtained.

DISCLAIMER

All information on this data sheet is based on laboratory testing and is not intended for design purposes. ITW Performance Polymers makes no representations or warranties of any kind concerning this data.

For product information visit www.devconeurope.com alternatively for technical assistance please call +353 61 771 500.