

## ProTXcoat 301

### Chemical Resistant Coating

**301** is a high performance solvent free coating designed for aggressive environments.

**301** is based on a special liquid epoxy polymer reacted with a blend of amine and polyamino resins reinforced with inert pigments and silicas which produces a system with exceptional chemical and corrosion resistance.

**301** offers excellent adhesion to steel and concrete and has outstanding abrasion and erosion resistance making it ideal for tanks, containment areas, steelwork and floors.

**Before proceeding, please read the following information carefully to ensure that the correct application procedure is fully understood.**

#### SURFACE PREPARATION

**Metal Surfaces** - Heavy contamination due to oil or grease must first be removed using MEK (Methyl Ethyl Ketone). Surfaces should then be abrasive blast cleaned to a minimum Sa2½ - Sa3 BS7079 Part A1 : 1989 or equivalent with a blast profile of 75 – 125 microns corresponding to 'Medium' in BS7079 Part C3/ISO 8503/1. All loose abrasive dust and debris must be blown clear or vacuum cleaned away.

Existing steel surfaces which have corroded in a chemical environment may be contaminated by soluble iron salts within corrosion pits. To prepare these surfaces it is recommended that one of the following treatments be carried out prior to final dry abrasive blasting to the specified standard.

- a) Blasting with a mixture of clean water and abrasive.
- b) Initial dry blast cleaning to remove corrosion and surface coatings followed by high pressure clean water jetting (minimum 1000 psi/66 bar).

**Concrete Surfaces** - All concrete to be coated should either be lightly abrasive blast cleaned using wet or dry abrasive techniques or alternatively high pressure water jetting. Care must be taken not to expose the aggregate in the concrete. All dust and abrasive material shall be removed from the surface prior to coating. Concrete surfaces should have a maximum moisture content of 7% prior to any coating being applied.

Concrete surfaces must be primed with ProTXcoat 302 epoxy primer in accordance with the product tech sheet.

#### MIXING

**301** is a two component material comprising base and activator components which must be mixed together prior to use.

Stir the contents of the base component, continue stirring and gradually add the total contents of the activator container, stir the combined mix until completely homogeneous.

The mixed materials should be used within 25 minutes of mixing at 20°C (68°F). This time will be reduced at higher temperatures and extended at lower temperatures.

#### APPLICATION

Application should not be carried out at temperatures below 5°C nor when relative humidity exceeds 85% or when the surface to be coated is less than 3°C above the dew point.

**301** is suitable for application by brush or roller, using good quality brushes or short to medium pile rollers.

On concrete surfaces it is important to stipple the **301** into the primed surface to ensure good wetting of the surface.

### Coverage Rate

2.24sqm per kg at 250 microns

Detailed working recommendations are available from the Technical Centre on request.

### PHYSICAL CONSTANTS

Mixing Ratio	Base	Activator
	2.4	1 Byvolume
	4	1 Byweight

Appearance	Base	Dark Grey liquid
	Activator	Amber fluid

### Drying & Cure Times

at 20°C (68°F)	Usable Life	25 minutes
	Initial Set	6 hours
	Min Overcoat	6 hours
	Max Overcoat	36 hours

Volume Solids 100%

V.O.C. Nil

Shelf Life Use within 5 years of purchase. Store in original sealed containers at temperatures between 5°C (40°F) and 30°C (86°F).

### PHYSICAL PROPERTIES

**Abrasion Resistance** 60 mgm loss per 1000 cycles  
ASTM D 4060 1 kg load - CS17 wheel

**Impact Resistance** 2.6 joules  
ASTM G14

**Dry Heat Resistance** 100°C (212°F)  
ASTM D2485

**Water Vapour Permeability**  $3.75 \times 10^{-6}$  perm.cm  
ASTM D1653

**Salt Fog Resistance** Excellent, unaffected after  
ASTM B117 10,000 hrs exposure

**Humidity Resistance** Unaffected 5,000 hrs  
BS 3900 Part F2

**Direct Pull Adhesion** 98 kg/cm<sup>2</sup> (1400 psi) Steel  
ASTM D4541

### HEALTH AND SAFETY

As long as normal good practice is observed **301** can be safely used.

Protective gloves should be worn during use.

A fully detailed **Safety Data Sheet** is either included with the material or is available on request.

### PACKAGING

Supplied in 5kg and 20kg packs

The information provided in this Product Data Sheet is intended as a general guide only and should not be used for specification purposes. The information is given in good faith but we assume no responsibility for the use made of the product or this information because this is outside the control of the company. Users should determine the suitability of the product for their own particular purposes by their own tests.



a Proprietary brand of Interinvestment BV

Schootbrugweg 12, 8085 RW, Doornspijk, The Netherlands

Tel: +31 (0)85 273 7970

[www.protxcoat.com](http://www.protxcoat.com)