Contite ® Polyurea

A 100% PURE POLYUREA WATERPROOFING SYSTEM

DESCRIPTION

Contite Polyurea is a 2 component 100% solids polyurea waterproofing system suitable for exposed environments.

USES & ADVANTAGES

Contite Polyurea is formulated for the waterproofing and corrosion protection of almost all substrates and is used in both commercial building, industrial complexes & infrastructure projects. It is formulated to withstand long term water immersion.
Areas of use include in:-
Airport facilities, power plants, marine environments, heavy industry, buildings, parking decks, potable water storage, waste water treatment plants & food processing plants.

Advantages include:-

- 2 component 1:1 by volume.
- Non toxic odorless and zero VOC.
- Excellent thermal stability, still flexible at low temperatures.
- Good resistance to chemicals.
- Abrasion resistant.
- Suitable for use in contact with potable water.
- 100% solids.
- Solvent free.
- Fast cure.
- High impact, tear, corrosion, abrasion and puncture, resistance.
- High output per day up to 1000 m^2.

PROPERTIES

PHYSICAL PROPERTIES

Chemical Structure: A = MDI Prepolymer
B = Amine Resin
Standard Colours: Grey
Density: 1.00-1.05 g/cm^3
ASTM D792
Gel/Set Time: ≤ 40 seconds
Tack-free Time: ≤ 50 seconds
Recoat Time: < 12 hrs.
Tensile Strength: ≥ 18 MPa
ASTM D412
Modulus: 100% elongation ≥10 MPa
300% elongation ≥15 MPa
Elongation: ≥ 500 %
ASTM D412
Hardness:
Shore A ≥ 80 ASTM D2240
Tear Strength: ≥ 60 N/mm
ASTM D624
Pull Off Strength: concrete : ≥ 2.5 N/mm^2
ASTM D4541 steel : ≥ 6 N/mm^2
VOC Content: 0 %
ASTM D1259
Solid Content: 100%
ASTM D2697
Crack Bridging Ability: 1 mm

Taber Abrasion: < 30 mg (H22, 1000 cycle)
EN ISO 5470-1
Chemical Resistance:

20% Sulphuric & Hydrochloric Acid (30days)	Good
NAOH 30% (30days)	Good
Oil Resistance (Diesel & Crude)	Good

COMPONENT PROPERTIES

	Component A (MDI Prepolymer)	Component B (Amine Resin)
Density@25ºC (gr/cm^3)**:**	1.11±0.03	1.02±0.02

PROCESS PROPERTIES

Mix Ratio
by volume [A : B] **:** 1 : 1
by weight [A : B] **:** 1.10 : 1
Process Temperature (ºC) **:** 70-80
Process Pressure (bar): 180-200

SURFACE PREPARATION

Concrete surfaces should be sound, clean and free of cement laitance. Abrasive blasting will achieve an open texture.
Surface defects must be repaired using a suitable repair mortar from Cormix
All dust and friable material to be removed, vacuum surfaces to remove dust .The pull off strength of the surface should be at least 1.5 N/mm^2 and the moisture content less than 4%.

PRIMING

Unsound friable surfaces having moisture content <4% shall be primed with **Floorgard Primer 903.**
Surfaces containing moisture >4% shall be primed with **Floorgard Moisture Barrier**.

CONSUMPTION & APPLICATION

Polyurea Coating : 1.00 - 1.05 kg/m^2/mm. Depends on surface of substrate.
The minimum thickness for abrasion resistance should be 2 mm and for pure waterproofing 1-2 mm. To build the thickness up allow enough time for the previous coat to become firm. In thicknesses over 3 mm pause for more than 5 minutes every approximately 3 mm.
The product may be top coated within 12 hrs of applying base coat with a colour stable aliphatic polyurea or polyurethane if required.
Apply as soon as possible after the final coat reaches tack free.

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Application should be through a plural component high pressure reactor at a minimum of 2000 psi spray pressure with a material temperature of 60-80ºC.
A Graco plural reactor may be used.
Prior to application, **Contite Polyurea** Part B must be stirred using a drill mixer until a homogenous mixture and colour obtained.
The min recommended material temperature is 24ºC & substrate 10ºC. The maximum substrate temperature is 50ºC. If in doubt consult Cormix.
Full cure takes up to 24 hours.
Old materials should be sound and lightly abraded.

PACKAGING

420 kg set.

Part A = 220 kg

Part B = 200 kg

STORAGE & SHELF LIFE

Store in a well ventilated warehouse in original closed drums at 20 -25ºC. Below 10ºC is not recommended protect from frost.

Do not heat the material above 80ºC

If stored correctly the shelf life is 9 months in unopened original packaging.

HEALTH & SAFETY

Refer to advise on the safe handling, storage & disposal of the material in the MSDS available from Cormix International Ltd

TECHNICAL SERVICE

The Cormix International Technical Service Department is available to assist you in the correct use of our products and its resources are at your disposal entirely without obligation.

QUALITY ASSURANCE

ISO 9001: 2015 verified by TUV Nord.
ISO 14001 : 2015 verified by Lloyd's Register International.

DISCLAIMER

Performance data is achieved testing in accordance with International Standards. Testing by others may result in different results from those published as a result of external factors such as poor sampling, incorrect mixing, varying temperatures, curing, crushing procedures etc.
Cormix does not take responsibility nor need to defend others testing that does not achieve the published data.
The user must test the products suitability for the intended application and purpose. Cormix reserves the right to change the properties of the product.
Site conditions and differences in materials are such that no warranty or fitness for a particular purpose, nor liability can be inferred from the published data sheet, written recommendations or from other advise offered.

CONTACT DETAILS

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