

CHEMFLEX PU 10

**SINGLE COMPONENT, EASY TO USE, ENVIRONMENT FRIENDLY
WATER BASED ELASTOMERIC POLYURETHANE COATING**



PRODUCT DESCRIPTION

CHEMFLEX PU 10 is a Tar, Asphalt and solvent free Polyurethane based elastomeric coating. A single component system which when applied cures to form highly elastomeric and water-resistant barrier with excellent adhesion to the substrate.

RECOMMENDED APPLICATIONS

Waterproofing of

- Wet areas like toilets, kitchens, balconies, patios
- Lift pits and underground concrete structures
- Gutters, planter boxes, troughs and tanks Green roof and flower beds
- Retaining walls and foundations
- As DPC layer under block work for mitigating rising dampness
- Inverted metal and concrete roof
- Bridges, highways and tunnels Swimming pools
- Reservoirs and landscaping features Gutters and downpipes
- Pedestrian decks

PRODUCT FEATURES

- High resistance to water
- Excellent mechanical, chemical, UV and weather resistance properties
- High elongation with excellent recovery
- Good abrasion resistance
- Environmental and application friendly
- Excellent adhesion to substrate
- Can be applied on irregular substrates and green concrete
- Highly durable film
- Excellent Crack bridging ability
- Best suited for damp surfaces

APPLICATION TEMPERATURE

The application temperature should be between 5°C to 45°C. Application procedures may vary slightly depending upon site conditions. Recommended guidelines for the application of the coating system is as follows:

SUBSTRATE PREPARATION

Concrete surface

The surface must be clean and structurally sound. Any loose surface should be chipped off and repaired. Sharp edges and protrusions should be levelled off to ensure uniform thickness build up. Use industrial grade detergent or degreasing compounds for removing oil or grease and wax contaminants. Cement laitance, mold release agents, curing membranes and other contaminants must be removed from the surface by grinding, shot blasting or scarifying followed by vacuum cleaning. Its recommended to paint all cracks on concrete surfaces with CHEMFLEX CM before the application of CHEMFLEX PU 10.

Steel surface

The substrate should be abraded using shot blasting with grit or steel balls. For non-accessible areas, pretreatment of the steel should be done using rotary wire brushes, premature descaling guns or flash scaling followed by cleaning with a strong solvent or detergent to remove the oil and grease contaminants. It is strongly recommended to coat as soon as the surface is cleaned to prevent the formation of rust or scale.

MIXING INSTRUCTION

Contents in the pail should be thoroughly stirred to ensure consistent viscosity and homogeneity.

PHYSICAL PROPERTIES

Color	Grey
Density	1.1 ±0.05 g/cc
Solid Content	>60%
Initial cure @ 35°C	24 hrs
Full cure @35°C	7 days

TECHNICAL DATA

Description	Test Method	Values
Tensile Strength	ASTM D 412	>5N/mm ²
Elongation	ASTM D 412	> 500%
Tear Strength	ASTM D 1004	> 10N/mm ²
Crack Bridging	ASTM C 836	3mm
Shore A Hardness	ASTM D 2240	40 - 50
Water Penetration	BS EN 12390	Pass
UV Resistance	ASTM G 154	300 hrs
Resistance to Water	ASTM D 2939	No blistering

APPLICATION PROCEDURE

CHEMFLEX PU 10 can be applied by brush, roller or spray. Apply the first coat of undiluted material at a coverage rate of 0.6L/m²/coat to get a Dry Film Thickness of 0.5 mm. Subsequent coats should only be applied after the initial cure of the first coat which should take approximately 12hrs. The second coat should be applied at right angle to the first at the same coverage rate, to ensure a full unbroken coating to the substrate.

THEORETICAL COVERAGE

1.2 ltrs /m²/2 coats (minimum 1mm DFT)

CLEANING

Tools can be cleaned with water while the CHEMFLEX PU 10 is still fresh. When hardened, it can only be removed by mechanical means.

PACKAGING

20 Ltr pail

STORAGE AND SHELF LIFE

Store all materials in a covered, cool and dry place . Avoid material allowing the material to freeze which will render the material unusable. If stored properly, CHEMFLEX PU 10 has a shelf life of at least 12 months.

HEALTH AND SAFETY

Caution should be exercised while applying the product as it is with any other construction chemical. Impervious gloves and barrier cream should be used when handling these products. Eye protection should be worn. If accidental eye contamination occurs, wash thoroughly with plenty of water and seek medical advice. If contact with skin occurs, it must be removed before curing takes place.

Above mentioned details and data are given based on the practical experience and applied testing. However as in most case as the application criteria differs from site to site it is required to observe the relevant guidelines and regulations of various organisations and trade associations as well as the respective standards. Warranted properties and possible uses which go beyond those warranted in this information sheet require our written confirmation. All data given was obtained at a specified ambient and material temperature as per standard requirements and are subjected to a tolerance of 10%, unless specified otherwise. Please note that under other climatic conditions hardening can be accelerated or delayed. Whilst Chemcrete’s endeavours to ensure that any advice, recommendation, specification of information it may give is accurate and correct, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products whether or not in accordance with any advise, specification or recommendation of information given by it.

