

# CHEM SEAL-105

ELASTOMERIC CEMENTITIOUS  
TWO COMPONENT

DATA SHEET



## CHEM SEAL-105

### ELASTOMERIC CEMENTITIOUS WATERPROOFING (TWO COMPONENT)

#### DESCRIPTION

CHEM SEAL-105 waterproofing is a two component waterproofing system, consisting of a cementitious Powder & a specially formulated acrylic polymer solution. When CHEM SEAL-105 powder mixed with CHEM SEAL-105 Liquid to a lump-free consistency. It provides a waterproof coating that is easily applied by brush, roller & rubber slider to concrete & masonry above & below ground level.

#### USES

- Waterproofing of concrete structures in industrial, commercial and residential buildings.
- Waterproofing & Protective Coating of Retaining walls from both positive & negative sides.
- Waterproofing and Protective coating for brick, block, stucco, unglazed terra Cota, Roof & Terraces
- Tanking of basements
- Water reservoirs
- Tunnels
- Swimming pools
- Lift pits
- Concrete pipes & drains
- Fish ponds, tanks, etc
- Toilet walls & floor prior to tilling

#### FEATURES & BENEFITS

1. Resists positive water pressure
2. Labor saving-simple & rapid application
3. Water vapor permeable
4. Allows substrate to dry out
5. Can be applied to damp substrate
6. Can be applied as water repellent
7. Bonds with concrete, masonry & clay/P.C.C tiles becoming an internal part of the substrate
8. Eliminates the need for water curing

#### PACKAGING

CHEM SEAL-105 is available in 3.25 kg, 08 kg & 16 kg unit:

1. A Part Powder available in:
  - 2.25 kg, 5.5 kg & 11 kg
2. B Part Liquid available in:
  - 1 kg, 2.5 kg & 5 kg

#### COLORS

CHEM SEAL-105 system is available in grey color.

#### Technical/Typical Properties

• Pot life at 20°C	01 hour
• Pot life at 40°C	30 minutes
• Wet density	1800Kg/m <sup>3</sup>
• Compressive strength 28 (DAYS)	40-45 N/mm <sup>2</sup>
• Tensile strength 28 (DAYS)	3.7N/mm
• Flexural strength 28 (DAYS)	7.6N/mm <sup>2</sup>
• Adhesive strength 28 (DAYS)	2.5N/mm <sup>2</sup>
• Water vapor permeability	86-20
• Maximum practical size	0.8mm

#### INSTRUCTIONS FOR USE:

##### SURFACE PREPARATION

Surfaces to be waterproofed must be completely clean and structurally sound. All surface coatings, defective renders, foreign matter, formwork treatments and other contaminants that may affect the bond adversely should be removed. Surfaces should be prepared by abrasive blasting or high-pressure water treatment. Do not use scabbling or any other aggressive method. Finally the surface should be washed with clean water to remove all dust and loose particles.

##### MIXING

CHEM SEAL-105 is supplied in pre measured units & should be mixed on site utilizing clean containers.

##### POWER MIXING:

Shake well the liquid component and pour it into a suitable clean mixing vessel. Gradually start addition of powder component under constant mixing with electrically operated machine paddle in a slow speed. Let the mix stand for 4-5 minutes to achieve a homogeneous and uniform free flowing slurry.

##### Hand Mixing:

For small batches, add the powder to liquid whilst stirring with a trowel or paddle.

##### CONSISTENCY

The material should be mixed to a thick, creamy, lump-free consistency that will just support the weight of the stiff brush. Mixed material must be used in 45 minutes at 20°C. Do not re-temper the mix.

##### HEALTH & SAFETY PRECAUTIONS:

CHEM SEAL - 105 is of low hazard. Protective gloves, goggles and clothing should be worn. Any contact with eyes or skin should be washed off with soap and clean water. Where this occurs, seek medical advice before continuing use.

## APPLICATION

Always apply to a pre-damed surface using a stiff-fibered brush. High suction substrates will require more dampening than dense substrates.

### First Coat:

Apply a first coat of CHEM SEAL-105 at a minimum rate of 0.75Kg/m<sup>2</sup>.

This coat should be brushed well into the surface. Care should be taken not to spread the material too thinly.

Finish in one direction only for a neat appearance. If the brush begins to drag during application, dampen the surface again. Allow at least an overnight cure before applying second coat.

Apply the second coat when the first coat is sound enough to receive it without damage.

### Second Coat:

Apply the second coat at a minimum rate of 0.75Kg/m<sup>2</sup>. This can be applied by brush, broom or spray.

If there is condensation on the wall, remove the excess moisture with a sponge. If the wall is too dry, dampen it with a sponge or fog-spray.

The second coat may be a different color to aid proper coverage, for example, white on grey. If the second coat is to be the final finish, it may be textured with a brush or sponge floated to give a uniform surface if plaster or render can be applied then finish the CHEM SEAL-105 with horizontal brush strikes to give more grip.

In most situations, the plaster or render can be applied the next day. If plaster is likely to be delayed for some time the CHEM SEAL-105 should be sand dashed immediately after application to aid adhesion. Never use a gypsum based plaster or low permeable paint to cover CHEM SEAL-105 in a tanking application.

## CURING

Fog-spray all application with clean water after the initial set has taken place for as long as practicable. In cold, humid or unventilated areas, it may be necessary to leave the application for long curing period or to introduce forced air movement.

## COVERAGE

Coverage is influenced by the roughness of substrate. The following may be used as a guide,

- Area coverage 120 - 150sf/16Kg pack
- Coverage depends upon the surface conditions.

On rough surfaces, the quantities required may increase by up to 50%

## CLEANING

Mixing & application equipment should be cleaned immediately with clean water.

## STORAGE & SHELF LIFE

CHEM SEAL - 105 has a shelf life of 12 months if kept in a dry cool place in the original packing. Do not stack more than 6 bags high.

## WARRANTY

This product is warranted to be free of defects in material and workmanship, and confirm to CHEMCONS construction chemicals quality control standards.

All recommendations, statement & technical data here in are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty or guaranty of any kind, expressed or implied warranty of merchantability or an implied warranty of fitness for a practical purpose.

### FOR YOUR INFORMATION:

CHEMCONS Construction Chemicals Company is the wide range manufacturer of construction chemicals, including concrete repairing mortars, curing compounds, adhesives, concrete protection coatings, waterproof coatings, heatproof coatings, grouts & Tile Bond.

**Separate Technical Data Sheets are available for these products.**

