

## **CICO CHEM 500 I**

### **PURE POLYURETHANE SINGLE COMPONENT WATERPROOFING MEMBRANE**

CICO CHEM 500 I is a liquid applied, high performance, low odour, cold curing, and one component pure polyurethane membrane used for long-lasting waterproofing. It is specially formulated for easy roller and spray application of all permanently flexible, tough, high build, pure elastomeric hydrophobic polyurethane resins, which result in excellent mechanical, chemical, thermal and natural element resistance properties.

#### **USES**

Long- lasting waterproofing for bathrooms, shower trays, laundries, toilets, spas, balconies, roof-decks, sill or window flashings, podiums, planters.

External - non trafficable areas, e.g. wall, planters. Tanking — retaining walls, landscaped areas, ponds, water features, non-potable water storage.

It can be applied to most stable surfaces — block, brick, concrete, render, timber, CFC, GRC, ALC, etc.

Swimming Pool, artificial lakes and ponds

Roof gardens

Retaining wall and foundations.

#### **FEATURES**

Easy, fast, high build, one-coat application.

Simple application (roller or airless spray).

When applied forms seamless membrane without joints.

Resistant to water & frost.

Crack-bridging.

Permanently flexible.

Provides water vapor permeability, so the surface can breathe.

Maintains its mechanical properties over a temperature span of -40°C to +80°C.

Provides excellent adhesion to almost any type of surface.

## METHOD OF USE

### Surface preparation

The area to be coated must be sound, smooth and free from dust, laitance, loose matter, oil or other contaminants. Remove any loose materials or laitance by scrapping, chipping, mechanical abrasion or any other suitable methods. Visible cracks, depressed or any porous substrates are to be filled or levelled with Acrylic based filler (Tapecrete – mortar) for concrete or brick surfaces. Apply one primer coat on prepared concrete or brick surface or mastic before application of CHEM 500 I.

### Priming

All prepared surfaces shall be primed with CICO CHEM 2P2/CHEM 2P before application of CICO CHEM 500 I. For more details about primer application refer Product Data Sheet.

### Application

**CICO CHEM 500 I** can be applied by brush, roller. It can also be applied by a suitable spray gun or spread by a rubber squeegee. Successive layers must be applied when the earlier layer has dried up. Protective concrete screed shall be provided over CHEM 500 I coating. For more details of specification contact CICO Technical team.

## COVERAGE

1.2-1.5 kg per m<sup>2</sup> in two coats for a minimum thickness of 1 mm, for heavy duty application, 1.5 mm thickness is recommended.

## PRECAUTIONS

- There should not be rain up to 24 hours after application of coating.
- Moisture content of the surface should not be more than 7 %
- Protective layer (based on cement- sand and 6-10mm down coarse aggregate mix) shall be provided on top layer.
- There should not be any naked flame near by the application and storage area.

## HEALTH & HAZARDS

Prolonged exposure may give rise to irritation of the skin and mucous membranes. Use of normal safety precautions such as wearing rubber gloves, safety shoes and safety goggles are recommended while handling the product. In case of accidental contact with eyes, washing with plenty of water and seeking of medical treatment immediately is recommended.

**TECHNICAL DATA**

<b>Specific Gravity</b>	1.3-1.4	DIN 53217
<b>Solid % Vol</b>	91 ± 3	ASTM C836
<b>Cure Time</b>	48 hrs	ASTM C 836
<b>Tensile Strength</b>	>2.5-3.0 Mpa	ASTM D412
<b>Elongation</b>	>550% -600 %	ASTM D412
<b>Hardness, Shore A</b>	60 ± 5	ASTM D2240
<b>Chemical Resistance</b>	Excellent	ASTM C543
<b>Adhesion To Concrete</b>	>2.0 N/mm <sup>2</sup>	ASTM D 903
<b>Resistant To Plant Root</b>	Resistant	EN 13948
<b>Crack Bridging</b>	Upto 2mm if coating thickness is more than 2mm	

**CLEANING**

Clean all machines, tools with aromatic thinner like C-9, Xylene, etc. Hardened coat shall be removed mechanically.

**PACKAGING**

Available in 5kg & 22 kg.

**SHELF-LIFE**

12 months from the date of MFG.

**Important Note:**

All CICO products are sold in the market after strict Quality Control in line of ISO 9001 and guaranteed against any manufacturing defect. Although the basic formulation of Company's products generally remains unchanged, production refinements arising from continuing research and evaluation program may occasionally result in marginal changes in properties. CICO aspires to ensure that any recommendation, advice, test data, specification, method statement and other information given in this product datasheet is accurate and best of company's knowledge. Since, the company (CICO TECHNOLOGIES LTD) has no control over the selection of its product, applicators, application methodology, how and where it is applied, therefore, the company cannot accept any liability directly or indirectly arising from the use of its product. It is important to any customer, user or specifier satisfies him / herself that the product is suitable for the intended purpose including health, safety and environmental aspect. Unless or otherwise agreed in writing, all products of the company are sold strictly pursuant to the terms of our standard conditions of sale which are available upon request. All information and technical assistance is given without warranty or guarantee and is subject to change without notice. All customers, users, specifiers should ensure that they examine the suitability of the product with company's latest product data sheet.

**CICO TECHNOLOGIES LIMITED**

Corp. Office: C-120, 2<sup>nd</sup> Floor, Okhla Industrial Area,  
Phase -I, New Delhi-110 020  
Tel. No: 91-11-4050 9400, Fax: 91-11-4050 9413  
E-Mail: [cicotech@cicogroup.com](mailto:cicotech@cicogroup.com)  
Web Site: [www.cicogroup.com](http://www.cicogroup.com)

