

# Chemolae 300

Chemolac 300 is a strong high performance chemical resistant novolac epoxy system.

# **Product Description**

Chemolac 300 is a two-component, high solids, novolac epoxy with outstanding chemical resistance. Chemolac 300 can be applied directly to the primed substrates as a high-performance topcoat.

# **Applications**

- Chemolac 300 is specially formulated for a highly aggressive chemical environment
- For use on concrete, cementitious mortar, epoxy mortars, and steel substrates.
- · For protective lining of storage tanks, ETP, silos, and bund areas
- As an anti-corrosion coating in food and beverage processing plants, sewage treatment plants, chemical and pharmaceutical plants, bottling plants etc.

# Salient Features

- Outstanding Resistance to many chemicals, acids and alkalis.
- Excellent Self levelling and anti-sag properties
- Superior Adhesion to Concrete and steel
- Outstanding Mechanical Strength and Abrasion Resistance
- Value for Money



Property	Test Method	d Value and Unit	
Mixing Ratio	NA	Pre-weighed kit to cover 10-12 sq m area @ 200- 250 micron thickness	
Finish	CPI* 1001	Non porus, Smooth, Glossy	
Pot Life @ 30oC	CPI 1002	30-35 minutes	
Surface Dry	CPI 1002	6 Hours	
Hard Dry	CPI 1002	24 Hours	
Full Cure	CPI 1002	72 Hours	
Compressive strength	ASTM C 579	>600 Kg/cm²	
Flexural Strength	ASTM C 580	ASTM C 580 >400 Kg/cm <sup>2</sup>	
Tensile Strength	ASTM C 307	1 C 307 >200 Kg/cm <sup>2</sup>	
Pull off Adhesion test	ASTM D 4541 Concrete Failure @ 18 Kg/cm <sup>2</sup>		
Abrasion Resistance[Taber]	ADTM D 4060 50 mg loss		
Shore Hardness	ASTM D 2240	D 80	
Service Temperature	CPI 1122	0-50 °C	
Shelf Life	-	12 months in the original unopened Container when stored between 10- 30 °C	

#### **Chemical Data**

Please refer chemsol's chemical resistance chart for chemolac 300

# **Method of Application**

All Chemsol Products are recommended to be applied only by Approved Applicators and should be handled after using proper PPEs like Gloves, mask, goggles, etc.

# **Application conditions**



Substrate temperature: 10-40 °C



Substrate moisture content: - <5%



**Relative humidity: 80%max** 

Note: The substrate temperature must be at least 30 °C above the prevalent dew point temperature to reduce chances of condensation on the substrate



#### **Substrate Quality**

The concrete substrate must be sound and of sufficient compressive strength (minimum 200 Kg/cm2) with a minimum pull-off strength of 15 Kg/cm2. The substrate must be clean, dry, and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc. If required, apply a test area first.

#### **Substrate Preparation**

Substrate must be prepared mechanically using abrasive blast cleaning, scarifying, or grinding equipment to remove cement laitance, rust and achieve an open Textured surface. Remove weak concrete and expose surface defects such as blowholes and voids. Repairs to the substrate, filling of blowholes/voids, and surface levelling must be carried out using appropriate products. Ensure that the dust, loose and friable material is completely removed from all surfaces by brush and vacuum before application of the product.

The substrate has to be primed or levelled with Chemprime in order to achieve an even surface. Allow the primer to cure for 5-6 hours. After this, apply a coat of Chemolac 300 by brush/roller or spray. Wait for 8 hours and repeat the same procedure for the second coat of Chemolac 300.

#### **Mixing**

Stir the resin part mechanically. Add colour paste into resin and mix until a uniform colour is achieved. Add hardener to this mixture and stir continuously for 2 minutes with a motorised paint stirrer until a uniform mix has been obtained. Overmixing must be avoided to minimise air entrainment.

Note that the mixture has a stipulated pot life hence the application should immediately commence after mixing the contents.

# **Curing Schedule**

The epoxy curing reaction rate is temperature dependent. Refer to the following table to know how quickly the floor can be brought to service

Temp.(deg C)	Foot traffic	Full cure
10°C	48 hours	120 hours
20°C	36 hours	96 hours
30°C	24 hours	72 hours

# **Cleaning of Tools**

Cleaning of Tools Clean all tools and application equipment with thinner PT 36 immediately after use. Hardened and/or cured material can only be removed mechanically.

# **Packing**

Chemolac 300 is available in pre pre-weighed kit which covers 10-12 sq.m area with an approximate thickness of 200-250 microns



# Storage conditions

Store in a dry and covered shed between 5 °C to 30 °C, away from sources of heat and naked flame.

#### **Handling & Safety**

Keep the containers tightly sealed when not in use. Avoid skin contact and inhalation of fumes (if any). While spraying, it is advised to wear a mask. If it comes in contact with the body, wash affected parts with plenty of water. In case of persistent irritation, contact a physician.

**Disclaimer:** The Information provided is based on our experience, thorough investigations & sophisticated testing methods, but due to the vast number of applications and usage methods, Chemsol Polymer Industries cannot accept responsibility of any kind for any particular result. It is the responsibility of the user to verify the suitability of the product for their end use and in accordance with the rules and regulations of that country /territory. All information provided pertaining to our products should be treated only as a guidance tool without any guarantee or warranty of any sorts.

\* All CPI test methods are our scientifically designed internal test methods which can be shared upon