

# Chemothane 1000 SL

A three-component, solvent-free polyurethane coating that provides a high-gloss, self-leveling finish.

## Product Description

Chemothane 1000SL is a 3-part, polyurethane resinous flooring system with a smooth and seamless gloss surface finish. It offers an aesthetically pleasing surface. Chemothane floors are known for their good chemical, abrasion, and impact resistance.

## Uses

- Industrial facilities: Self-leveling polyurethane coatings are commonly used in industrial facilities because of their high chemical and abrasion resistance.
- Commercial facilities: These coatings are also used in commercial facilities, such as retail stores and restaurants, because of their attractive appearance and durability.
- Healthcare facilities: Self-leveling polyurethane floor coatings are ideal for use in healthcare facilities because they are highly resistant to bacteria and can be easily cleaned and disinfected.
- Educational facilities: These coatings are also used in educational facilities, such as schools and universities, because of their durability and ease of maintenance.
- Warehouses: Self-leveling polyurethane floor coatings are a popular choice for warehouse floors because of their high resistance to abrasion and heavy loads.

## Salient Features:

- **High-gloss finish:** Self-leveling polyurethane floor coatings have a high-gloss finish that gives them an attractive, professional appearance.
- **Chemical resistance:** These coatings are highly resistant to a wide range of chemicals, including oils, acids, alkalis, and solvents.
- **Abrasion resistance:** Self-leveling polyurethane floor coatings are highly resistant to wear and tear, making them ideal for use in high-traffic areas.
- **UV resistance:** Some self-leveling polyurethane floor coatings are formulated with UV stabilizers that protect them from fading and discoloration caused by exposure to sunlight.

## Product Data

<b>Appearance / colour:</b>	Chemothane [R] Resin:	Milky white liquid
	Chemothane [H] Hardener:	Brownish liquid
	Chemothane pigment:	Coloured paste
<b>Storage conditions /shelf life</b>	12 months from the manufacturing date if stored properly in undamaged seal packaging at a temperature between 5 °C- 30 °C. It should be kept in a cool, well-ventilated area, away from heat, direct sunlight, sparks, and children.	

## Technical Information

### Mechanical /Physical properties

Property	Test Method	Value and Unit
Mixing Ratio	NA	Pre weighed kit to cover 10-12 sq.m area @ 1000 micron thickness
Finish	CPI* 1001	Non porous, Smooth, Glossy
Pot Life @ 30oC	CPI 1002	30-35 minutes
Surface Dry	CPI 1002	3 Hours
Hard Dry [Open for foot traffic]	CPI 1002	24 Hours
Full Cure [Vehicular Movement]	CPI 1002	72 Hours
Compressive strength	ASTM C 579	>300 Kg/cm <sup>2</sup>
Flexural Strength	ASTM C 580	>400 Kg/cm <sup>2</sup>

Tensile Strength	ASTM C 307	>200 Kg/cm <sup>2</sup>
Pull off Adhesion test	ASTM D 4541	Concrete Failure
Abrasion Resistance[Taber]	ADTM D 4060	80 mg loss
Shore Hardness	ASTM D 2240	D 60
Service Temperature	CPI 1122	0-500C
Shelf Life	-	12 months in the original unopened Container when stored between 10- 30 °C

## Method of Application

All Chemsol Products are recommended to be applied only by Approved Applicators and should be handled after using proper PPEs as 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 floor.

## Substrate Quality

The concrete substrate must be sound and of sufficient compressive strength (minimum 200 Kg/cm<sup>2</sup>) with a minimum pull-off strength of 15 Kg/cm<sup>2</sup>. 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.

## Mixing

- Stir the resin part mechanically. Add colour paste into resin and mix till a uniform colour is achieved. Add hardener to this mixture and stir continuously for 2 minutes until a homogeneous mass is obtained. Overmixing must be avoided to minimise air entrainment.
- Note that the mixture has a stipulated pot life, hence the laying should immediately commence after mixing the contents.

## Substrate Preparation

Concrete substrates must be prepared mechanically using abrasive blast cleaning, scarifying, or grinding equipment to remove cement laitance 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 concrete 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, depending on the system selected, either apply a screed coat followed by a top coat of Chemothane 1000, or the topcoat of Chemothane 1000 can also be directly applied to the primer coat.

## 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

Clean all tools and application equipment with thinner EP140 immediately after use. Hardened and/or cured material can only be removed mechanically.

## Packing

Chemothane 1000 SL Resin, Hardener, and aggregates are available in a 16.4 kg pre-weighted kit.

## 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 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 request.

### Factory Address:

Plot No. C93, MIDC, Additional  
Jejuri, Tal: Purandar, District, Pune,  
Maharashtra, India. PIN: 412303

### Correspondence Address:

Office No. 101, G wing, KK  
Market, Dhankawadi, Pune-  
411043.

### Enquiry:

Mobile: +91-7720002824 | 020-24371247  
For Sales: [sales@chemsolpoly.com](mailto:sales@chemsolpoly.com)  
For Materials: [purchase@chemsolpoly.com](mailto:purchase@chemsolpoly.com)