

# **TECNOTOP 1C** - SINGLE COMPONENT, COLORED, ALIPHATIC RESIN TO PROTECT AGAINST UV RAYS

TECNOTOP 1C is a single component aliphatic resin for treatment, decoration, and protection of flooring has a satin finishing and forms a flexible, continuous film, with excellent adhesion and mechanical properties as its resistance to abrasion and stress that make it resistant to weathering, extreme temperatures, and UV radiation.

# **USES**

Resin to use in the next situations:

• Protection against UV rays on TECNOCOAT pure polyurea membrane or DESMOPOL polyurethane membrane on flat or sloped roofs, terraces, and balconies (light traffic or maintenance)

NOTE: call our technical department about the application to other supports or situation

consumption	70~100 g/m²/coat
drying time at 23°C	±5 minutes
recoat time at 23°C	0,5~48 hours
dilution	DESMOSOLVENT (max. 5%)
application method	by brush, roller or "airless" equipment, applied on thin coats



## **COLORS**



# **GENERAL FEATURES**

• It is a satin, aliphatic, single component, colored resin



- Tack free time: 5 minutes; open to use: 3 hours
- · Scope: roofs, terraces o light walkable transit areas
- It forms a continuous coating, easy to clean and maintain and resistant to algae and mold growth.
- TECNOTOP 1C should be applied in dry conditions avoiding the presence of humidity or water coming from the surface to be coated or the substrate, whether at the time of application or subsequently (pressure from phreatic water level).
- In the event there is humidity in the substrate at the time of application, consult the technical specifications of our primers where their maximum humidity ranges are specified.
- TECNOTOP 1C can be applied on a variety of surfaces: concrete, cement, ceramics, TECNOCOAT or DESMOPOL membranes (for UV rays protection)
- Apply on dry, firm substrates, with a surface temperature of between 3 °C above the dew point, an ambient temperature of at least 10 °C.
- TECNOTOP 1C must be applied in thin layers, with a roller, brush or airless spray equipment (nozzle: 0.007" to 0.011"; nozzle tip pressure, 180 to 200 kg/m²), always applied on thin coats
- Do not apply to swimming pools or, in general, on surfaces that undergo total immersion. (for these uses, please check TDS TECNOTOP 2CP)

## **YIELD**

The yield of TECNOTOP 1C varies depending on the layers applied, the type of substrate or the final use. It is applied in thin layers, consumption is approximately 70~100 g/m²/coat

## **PACKAGING**

Metal tins of 5 and 20 kg

## SHELF LIFE

Expires after 12 months, at temperatures between 5° C and 35°C, provided it is stored in a dry place. Once the tin has been opened, it must be used immediately.

## APPLICATION METHOD

In general, you should take the following factors:

- repair the surface (fill in depressions, eliminate unevenness, eliminate any old waterproofing, etc.)
- detail work: preparation(perimeter, sinks/drainages, expansion joints or structural)
- clean up the surface or substrate, removing any dust, dirt, grease, or efflorescence.
- the surface has to be enough compressive strength of adhesion of the membrane. If it were not so, we will proceed to apply our primers resins to achieve this target
- in case of Tecnotop 1C neutral version, add the proper quantity of PIGMENTS (20%) inside the component and mix until getting a homogenized product, using an electric mixer medium speed
- in case of Tecnotop 1C already pigmented, mix to getting a homogenized product
- in case of doubt of all above, apply before in a restricted area and to check

TECNOTOP 1C can be applied to many different surfaces and the procedure will vary depending on its nature or state. Below we set out some of the applications for the most common surfaces; for other surfaces not described, please contact our technical department.

## TECNOCOAT/DESMOPOL, waterproofing membranes

- clean up the surface or substrate, removing any dust, dirt, grease or efflorescence
- apply PRIMER PU-1000/PRIMER EPw-1070, with a yield of approximately 50~70 g/m², if the time of application of membrane(TECNOCOAT or DESMOPOL) is over 24~48 h, and depending on the state of the substrate or the



- surface's porosity too.
- apply by roll, thin coats of colored TECNOTOP 1C recommended consumption around 70-100 g/m², or depending needs

#### Cement or concrete surfaces

- any depressions or voids should be repaired using a mix (ratio of ±1:4) of our epoxy resin PRIMER EP-1020 mixed with silica sand.
- fill joints with MASTIC PU, polyurethane mastic
- the concrete should be completely cured (concrete curing takes 28 days), or, in any case, the maximum level of humidity allowed for the substrate should be verified, depending on the primer used.
- any concrete laitance or release agents should be eliminated and an open the pore surface achieved by grit blasting, milling, or sanding.
- clean up the surface or substrate, removing any dust, dirt, grease, or efflorescence.
- apply PRIMER PU-1050/PRIMER PUc-1050/PRIMER EPw-1070/PU-1000 always applying several thin coats depending on the surface's situation
- apply by the roll, thin coats of colored TECNOTOP 1C recommended consumption around 70-100 g/m², or depending needs

## **Painted surfaces**

- if the existing paint is in good condition, clean the surface with a mixture of water and industrial detergent. Leave to dry.
- remove the existing paint if it does not offer good bonding conditions and eliminate any substrate in poor condition as this could hamper TECNOTOP 1C bonding.
- · clean up and leave to dry
- apply PRIMER EPw-1070, with a yield of approximately 250 g/m² always depending on the state of the substrate or the surface's porosity. Apply the necessary layers to coat fully.
- apply by roll, thin coats of colored TECNOTOP 1C recommended consumption around 70-100 g/m², or depending needs

## **APPLICATION TYPES**

If so required, TECNOTOP 1C can be applied with a non-slip finish as follows:

## TECNOPLASTIC F/C system

- mix our TECNOPLASTIC F/C into the TECNOTOP 1C product (maximum 8-9%, recommended ±7 %)
- apply a coat if it's necessary to cover completely the surface; use a roll in thin coats (approx. consumption per coat 80-100 g/m<sup>2</sup>). Conforming even to norm ENV 12633:2003 (floors slipperiness), to achieve Class 3 (>45 slip resistance
- if it is necessary, apply a second coat of TECNOTOP 1C without TECNOPLASTIC.

## Notes:



- Consult in all cases the waiting times, drying time, singular points treatment, conditions of application of all the products through the technical data sheets of each product, the technical handbook of application of TECNOCOAT, or consult our technical department.
- For other types of supports/substrates, for further information on the execution application procedure, for any additional questions, please, consult the technical data sheets (TDS) of these products, or our technical department.
- These guidelines are valid although they can be modified, according to the situation of the supports, conditioning
  of the bearing structures of the elements to be waterproofed, external climatology or situation at the time of
  application

# **COMPLEMENTARY PRODUCTS**

TECNOTOP 1C may be complemented with the following products as a means of protection or to improve its physical-mechanical properties depending on its exposure, the desired finish, or the type of substrate.

- PRIMER EP-1020: mixed with silica sand in a ratio of ±1:4, or calcium carbonate in ratio ±1:2, this is used to fill in depressions in concrete surfaces, rapidly providing a firm and fast drying even base.
- PRIMER PU-1050 |PRIMER EP-1040 | PRIMER EPw-1070 |PRIMER PUc-1050 |PRIMER PU-1000 |PRIMER WET | PRIMER EP-1020: these several resins are applied on the substrate beforehand to improve bonding and level the surface, as well as regulating the humidity in the substrate (see permitted levels in their technical specifications). Consumption may vary depending on the type of support, nature or surface texture. Consult the technical specifications of each product or our technical department.
- TECNOPLASTIC F/C: this plastic powder, once mixed with TECNOTOP 1C forms a rough surface, conforming even to norm ENV 12633:2003 (floors slipperiness), to achieve Class 3 (>45 slip resistance), depending on dosage (consult our technical department).
- TECNOBAND 100: the cold bond deformable band made up of an upper layer of non-woven textile and a lower layer of viscoelastic self-adhesive coating, which together allow it to adapt to the shape of the substrate. This band is ideal when dealing with structural joints and overlapping metal materials.
- MASTIC PU: polyurethane mastic for filling joints (use together with TECNOBAND 100 when necessary).

# HANDLING AND TRANSPORT

These safety recommendations for handling, are necessary for the implementation process as well as in the pre and post, on exposure to the loading machinery.

- Respiratory Protection: When handling or spraying use an air-purifying respirator.
- Skin protection: Use rubber gloves, remove immediately after contamination. Wear clean body-covering. Wash thoroughly with soap and water after work and before eating, drinking, or smoking.
- Eye / Face: Wear safety goggles to prevent splashing and exposure to particles in the air.
- Waste: Waste generation should be avoided or minimized. Incinerate under controlled conditions in accordance with local laws and national regulations.

Anyway, consult the material and safety data sheet of the product (MSDS) or contact our technical department.



## **TECHNICAL FEATURES**

PROPERTIES	VALUES
Density at 23 °C ISO 1675	±1,20±2 g/cm³
Viscosity at 23 °C ISO 2555	500/600 cps
Solid contents ISO 1768	±63%
VOC(volatile organic compounds)	444 g/l
Adherence to concrete at 23 °C	>1,3 MPa
Drying time at 23 °C	±5 minutes
Complete cured time at 23°C	7 days
Support temperature range	8 °C~30 °C
Environmental temperature range	8 °C~35 °C
Service range temperature	-30 °C~80 °C
Repaint time at 23 °C	±5 min ~ 48 hours
Walkable(pedestrian) at 23 °C	from ±3 hours
Application method	by roll, brush or airless equipment

These values in this table are approximate and can vary depending on the situation of the carrier or application methodology employed.

The information herein is to assist customers in determining whether our products are suitable for their applications. Our products are only intended for sale to industrial and commercial customers. The customer assumes full responsibility for quality control, testing, and determination of the suitability of products for its intended application or use.

We warrant that our products will meet our written liquid component specifications. We make no other warranty of any kind, either express or implied, by fact or law, including any warranty of merchantability or fitness for a particular purpose since Tecnopol Sistemas S.L.U. does not control the execution, since Tecnopol Sistemas S.L.U. does not control the execution. Our total liability and customers' exclusive remedy for all proven claims is the replacement of the nonconforming product and in no event shall we be liable for any other damages. While descriptions, designs, data and information contained herein are presented in good faith and believed to be accurate, they are provided for guidance only. Because many factors may affect processing or application/ use, Tecnopol Sistemas S.L.U. recommends that the reader make tests to determine the suitability of a product for a particular purpose prior to use.

No warranties of any kind, either expressed or implied, including warranties of merchantability or fitness for a particular purpose, are made regarding products described or designs, data or information set forth, or that the products, designs, data or information may be sued without infringing the intellectual property rights of others. In no case shall the descriptions, information, data or designs provided be considered a part of Tecnopol Sistemas S.L.U. terms and conditions of sale. Further, the descriptions, designs, data, and information furnished by Tecnopol Sistemas S.L.U. hereunder are given gratis and Tecnopol Sistemas S.L.U. assumes no obligation or liability for the description, designs, data or information is given or results obtained, all such being given and accepted at the reader's risk.

All data furnished refers to standard production using manufacturing testing tolerances. The product user, and not Tecnopol Sistemas S.L.U., is responsible for determining the suitability and compatibility of our products for the final user's intended use.

The liability of Tecnopol Sistemas S.L.U.and its affiliates for all claims is limited to the purchase price of the material.

Products may be toxic and require special precautions in handling. Users should obtain detailed information on toxicity, together with proper shipping, handling and storage procedures, and comply with all applicable safety and environmental standards.

No freedom from any patents or other industrial or intellectual property rights is granted or to be inferred.

