



DESMOPOL 2CB - POLYURETHANE/BITUMEN MEMBRANE FOR WATERPROOFING

DESMOPOL 2 CB is a two components liquid material, made up from bitumen and a pure polyurethane elastomer, which once catalyzed forms a continuous elastic membrane, without any joints, overlapping or any integrated mesh needs. Its properties make it an excellent choice for achieving air-tightness and perfect waterproofing on a multitude of surfaces and substrates.

It is applied manually, using a roller or brush and, exceptionally, using specific spray equipment

USES


To waterproofing or coating:

- Roofs, terraces, balconies (under tiles) and overhangs.
- Metal and asbestos roofs.
- Bridge platforms, foundations, walls, and basements.
- Waterproofing of underground structures in general.
- Roof gardens.

recommended consumption	2 kg/m ² - 1,5 mm thickness
dry time at 23 °C	±4~5 hours
time to repaint at 23 °C	±5~48 hours
application method	by roll, brush, or "air-less" equipment
concrete adherence	>2 MPa



COLORS

	Black
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GENERAL FEATURES

- DESMOPOL 2CB is highly elastic with a low modulus membrane that, once applied, offers great stability and durability.
- Mix ratio 1:1 by volume.
- Thanks to its versatility DESMOPOL 2CB adapts to any surface, making it the ideal product for application on uneven surfaces and in areas of any shape, whether curved or squared.



- No surface reinforcement is required, only singular points of encounters with other building elements
- Applying DESMOPOL 2CB saves in seals and any other kind of joints, as the finish is uniform and makes up a single layer, providing a surface with optimum maintenance and cleaning properties.
- The DESMOPOL 2CB bitumen-polyurethane membrane system 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 case of the presence of humidity in the substrate at the time of application, consult the technical specifications of our primers where the maximum humidity ranges are specified.
- The DESMOPOL 2CB system needs not be exposed to solar radiation (UV rays) to ensure it does not lose its properties, given that it is an aromatic membrane.
- The DESMOPOL 2CB system's properties enable it to bond to any surface, such as cement, concrete, polyurethane, metal, etc.
- DESMOPOL 2CB is immune to temperature changes of between -40° and +80°, conserving its elastic properties.
- The DESMOPOL 2CB bitumen-polyurethane membrane is a self-leveling membrane that requires additives for its application on sloped surfaces or areas with a gradient of more than 2%.
- The repairs are easily localizable and are easy to carry out.

YIELD

Product yield is 1.5 to 2 kg/sqm. with a thickness of 1.5 to 2 mm, applied in 2-3 layers.

PACKAGING

Kit metal tins of 20 kg. each

SHELF LIFE

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

APPLICATION

In general, the following aspects should be dealt with prior to spraying:

- Repair the surface (fill in depressions, eliminate unevenness, eliminate any old waterproofing, etc.).
- Clean the surface or substrate, removing any dust, dirt, grease, or efflorescence.

The DESMOPOL 2CB bitumen-polyurethane system 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.

Cement or concrete substrate

- any depressions or voids should be repaired using a mix (ratio of $\pm 1:4$) 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 latencies or release agents should be eliminated and an open-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, with a yield of approximately 250 g/m² (two layers) always depending on the state of the substrate or the surface's porosity.



- apply DESMOPOL 2CB

Metal substrate:

- Metal surfaces should be prepared using sand-blasting, in order to improve the surface's mechanical fixation properties.
- Check the seals and overlaps and where necessary seal with MASTIC PU mastic or TECNOBAND 100, in combination.
- For rapid and efficient cleaning of the surface using a ketone-based solvent.
- Apply prior priming using a water-based epoxy type primer, our PRIMER EPw-1070, to improve surface leveling and bonding. Consult the technical specifications of this product.
- apply DESMOPOL 2CB

Ceramic substrate:

- Ceramic surfaces should not have empty joints or loose elements or parts. These should be filled with MASTIC PU mastic, complemented with TECNOBAND 100 on the joints if necessary.
- For rapid and efficient cleaning of the surface use pressurized water and check that it evaporates completely. Also, verify that all dust and other physical contaminants have been eliminated.
- Next apply the required primer; in these cases of non-porous surfaces use the water-based epoxy PRIMER EPw-1070
- apply DESMOPOL 2CB

HEALTH AND SAFETY

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 safety data sheet of the product(MSDS) or contact our technical department.

COMPLEMENTARY PRODUCTS

The DESMOPOL 2CB system 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-1010: 100% solids, two-component, fillerized epoxy resin, to fill in depressions in concrete surfaces, one coat application so, rapidly providing a firm and fast drying even base.
- PRIMER PU-1050/PRIMER EP-1040/PRIMER EPw-1070/PRIMER PUc-1050/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.
- TECNOCOAT CP-2049: pure cold polyurea coating for manual application, self-leveling for small applications on TECNOCOAT P-2049, repairs or application in areas of difficult access
- TECNOCOAT CP-2049 PLUS: pure cold polyurea coating for manual application, self-leveling for small applications on TECNOCOAT P-2049, repairs or application in areas of difficult access.
- TECNOTOP 2C: dual-component colored aliphatic polyurethane resin, used to protect walkable and vehicular



- roofs and floors or ground against UV rays when there is no other protection.
- **TECNOTOP 2CP:** dual-component colored aliphatic polyurethane resin used to protect against UV rays and chlorinated water when waterproofing swimming pools, lakes, and aquariums.
 - **TECNOTOP 1C:** single component colored aliphatic, used to protect non-walkable roofs or only for maintenance, against UV rays when there is no other protection
 - **TECNOTOP S-3000:** (polyaspartic resin) two-component, aliphatic, colored, cold polyurea coating for protection against UV rays, in situations of decks or floors without additional protection. Excellent for vehicular cover applications, quick-drying, and setting up.
 - **TECNOPLASTIC:** this plastic powder, once mixed with TECNOTOP 2C/2CP/S-3000/1C, 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.
 - **TECNOBAND 200 FLEX:** elastic, rubber band for structural joints with high movement
 - **MASTIC PU:** polyurethane mastic for filling joints (use together with TECNOBAND 100 when necessary).



TECHNICAL DATA

PROPERTIES	VALUES	METHOD
Specific weight at 23°C	±1.00 g/cm ³	DIN 53 217
Viscosity at 25 °C comp. A Viscosity at 25 °C comp. B	450-550 cps 350-450 cps	ASTM D2196-86
Dry extract at 105 °C (% on weight)	>85	EN 1768
Flash Point	>35°C	ASTM D93
Ashes at 450 °C % weight	55~60%	EN 1879
Tensile strength at 23 °C	>1,5 MPa	
Elongation at break at 23 °C	>750 %	
Application temperature range	5 °C~35 °C	
Hardness Shore A at 23°C	>30	
Initial dry time at 23 °C and 55% relative humidity	±4~5 hours	
Service/use temperature range	-20~80 °C	
Recoat range time at 23°C	±5~48 hours	
Water absorption	<1%	
water vapor permeability	0,8 g(m ² /hour)	
Concrete adherence	>2 MPa	

Results performed in the laboratory at 23°C and 50% RH, under controllable conditions. These values may vary depending on the application, climatology, or substrate conditions.

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