

# 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 catalysed 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 consumtption	2 kg/m²		
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

## **GENERAL FEATURES**

- DESMOPOL 2CB is a 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 joins, 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 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 25° 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 application 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 ±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 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 use 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

#### **HANDLING**

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 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-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 EPw-1070/PRIMER PUc-1050/PRIMER PU-1000: 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.



## **TECHNICAL DATA**

PROPERTIES	VALUES	METHOD
Specific weght at 23°C	1.0 ~1.05 kg/m³	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(m²/hour)	
Concrete adherence	>2 MPa (N/mm²)	

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

