



# MAXELASTIC<sup>®</sup> TRANS



## TRANSPARENT POLYURETHANE ELASTOMERIC MEMBRANE FOR WATERPROOFING OF ROOFS AND OUTDOOR AREAS



### DESCRIPTION

**MAXELASTIC<sup>®</sup> TRANS** is a single component liquid product ready to use, based on moisture curing special aliphatic polyurethane resins, that provides a transparent, elastic and waterproofing membrane suitable for long-term protection and waterproofing of concrete, tiles, bricks, wood, stone, glass, etc.

### APPLICATION FIELDS

- Transparent and elastic waterproofing for all types of roofs, terraces and balconies subject to pedestrian traffic.
- Waterproofing and protection for tiles, metal roofing, cement mortar and concrete, ceramics, fibrocement, etc.
- Waterproofing and protection of transparent covers and roofs made of glass, plastic or polycarbonate.

- Coating and protection against weathering for bricks, ceramic tile and stone masonry in outdoor areas against atmospheric agents: acid rain, frost, etc.

### ADVANTAGES

- Very high elasticity at both low and high temperature, enabling to absorb thermal movement of substrate with extreme weather conditions as well as vibrations.
- Excellent crack-bridging ability, acting as anti-fracture membrane on substrate.
- It forms a continuous waterproof membrane with no need of joints or connections, and it seals cracks permanently.
- Good abrasion resistance, suitable for pedestrian traffic.
- Withstands UV radiation, it does not turn yellow on outdoor applications.

- Excellent adhesion on common substrates in construction: concrete, mortar, brick, porous ceramics, tiles, metallic surfaces, etc.
- Good chemical resistance to de-icing salts, seawater, wastewater, alkali and acids diluted solutions.
- Permeable to water vapour.
- Withstands a wide temperature range, from -40°C to 100°C.
- Long-lasting protection compared to paints and other coatings, maintenance-free.
- Ready to use and easy applied manually or by airless spray.

## APPLICATION INSTRUCTIONS

### Surface preparation

Surface must be sound, dry, porous and clean, free of badly adhered particles and as even as possible. Equally, substrate must be free from dirt, old paints, gypsum, efflorescence, greases, oils, as well as de-moulding agents, curing agents or any coating, which could affect the adhesion. If surface was previously covered with lime, acrylic treatments, etc. They must be completely removed, just remaining strongly fixed remainings. For the cleaning and preparation of the substrate, in smooth or non-porous substrates, preferably use sand blasting or high-pressure water. Aggressive mechanical methods are not recommended.

Surface damages such as defects, cavities, honeycombs, peelings, unsound areas and fissures without movements, once cleaned and opened up to 2 cm minimum depth, should be restored with a structural repair mortar such as **MAXREST®** (Technical Bulletin No. 2). Remove all concrete around structural reinforcement affected by corrosion, clean of rust or scale and then, coat with the oxide converter and anti-corrosion protection **MAXREST® PASSIVE** (Technical Bulletin No. 12). Non-structural surface steel bars must be cut up to 2 cm depth prior to being covered with structural restoration mortar.

Metallic surfaces must be cleaned by sandblasting or shotblasting to eliminate all superficial corrosion and rust, and also must be degreased, dried and free of dust. Over non-porous, non-absorbent or polished substrates as metal, vitrified materials, ceramic tiles, etc., **MAXPRIMER® PUR** (Technical Bulletin No. 195) as primer must be applied.

### Application

**MAXELASTIC® TRANS** is supplied ready to use and just requires stir the content of the packaging using a dry and clean tool or preferably by mechanical means with a slow speed drill (300-400

rpm) in order to get a homogeneous paste before its application.

Preferably, in order to improve product's penetration in pours and cavities, apply it by short hair roller or solvent-resistant brush, pushing it softly over the substrate. In air-less machine applications, the dilution of the product with **MAXSOLVENT®** in minimal proportion in order to improve its projection is recommended.

Over porous substrates, the first coat should be diluted with 10–20 % of **MAXSOLVENT®** for better penetration.

*Waterproofing and protection of concrete, mortar, metal surfaces and other substrates:*

Apply two coats, with a coverage of 0,5-0,6 kg/m<sup>2</sup> per coat and in perpendicular direction each other. Allow first coat to dry between 10 and 12 hours depending on environmental and ventilation conditions. The total application thickness, in two coats, should be about 1 mm.

For an anti-slip finish surface, before the first coat dries, dusting the area with dry silica sand (up to 1 mm size) with a recommended coverage of 1,0-1,5 kg/m<sup>2</sup>. Once it dries, sweep and vacuum the surface and then, apply the second coat of **MAXELASTIC® TRANS** with a coverage of 0,6-0,9 kg/m<sup>2</sup>.

If a matt finish surface is required, one coat of **MAXELASTIC® TRANS -M** (Technical Bulletin No. 187) with a recommended consumption of 0,25 kg/m<sup>2</sup> should be applied on **MAXELASTIC® TRANS** after it dries between 12 to 24 hours.

For decorative finishes, add **MAXURETHANE® DECOR** pigment paste (Technical Bulletin No. 58) and apply the resulting mixture according to the instructions given above.

For vertical applications, product should be applied in three coats for the same total thickness.

*Active fissures:* Once the fissure or joint is properly treated with an appropriate sealant as **MAXFLEX®** range and after its curing time has finished, apply **MAXELASTIC® PUR** coating reinforced with glass fiber or polyester veil.

*Expansion joints:* After properly treating and sealing them with **MAXFLEX®** products and after their curing time has finished, the joints must not be covered by the coating, respecting their position and avoiding contact with the sealing material.

## Application conditions

Avoid outdoor applications if rains or contact with water, moisture, condensation, dew, etc. are expected in the following 24 hours after its application.

Do not apply neither below 5°C or when such temperatures are expected to drop within 24 hours after application. Do not apply on frozen or frosty surfaces.

Substrate and ambient temperature must be at least 3°C than dew point. Do not apply **MAXELASTIC® TRANS** above 85 % of relative humidity. Measure the relative humidity and dew point for applications carried out in proximities of marine environment.

For applications carried out at low temperatures, i.e. less than 15°C, high relative humidity (between 70-85 %) or marine environment, use a 1 kg of the catalyst **MAXELASTIC® PUR CAT** (Technical Bulletin No. 214) per each 25 kg drum of **MAXELASTIC® TRANS** in order to speed up the curing process.

## Curing

Allow a minimum curing time of 3 days at 20°C and 50 % R.H. before pedestrian traffic or 7 days before flood test. Lower temperature or higher R.H. increase the curing time before putting into service.

## Cleaning

Use **MAXSOLVENT®** for cleaning all tools and equipments immediately after application. Once it cures, product can only be removed by mechanical means.

## CONSUMPTION

Coverage is estimated between 0,5-0,6 kg/m<sup>2</sup> approximately per coat, with an average film thickness of 0,5 mm per coat, in order to achieve a total coverage of 1,0-1,2 kg/m<sup>2</sup> in two coats.

These estimative consumptions may vary depending on substrate conditions and application method. A preliminary test on-site will determine the coverage exactly.

## IMPORTANT INDICATIONS

- Do not apply **MAXELASTIC® TRANS** exposed to rising damp or negative hydrostatic pressure.
- Surface moisture content must be below 5 % before application.

- Allow sufficient time for the substrate to dry after rain, dew or other inclement weather and after cleaning surface.
- Allow new concrete, pointing mortar or renders to cure 28 days before application.
- Minimum-maximum consumption ratios must be respected.
- Do not exceed the recommended ratio when mixing with **MAXSOLVENT®** and do not use any other different solvent. Other solvents could modify or inhibit the curing process.
- For other uses not specified in this Technical Bulletin or further information, consult our Technical Department.

## PACKAGING

**MAXELASTIC® TRANS** is supplied in 5 kg and 25 kg drum.



## STORAGE

Twelve months in its original unopened container in a dry and covered place, protected from humidity, frost and sunlight, with temperatures between 5°C and 35°C. Storage at higher temperatures may result in an increase of viscosity.

## SAFETY AND HEALTH

**MAXELASTIC® TRANS** is a flammable product so all storage, transport, handling and application precautions must be observed for this kind of product. Do not smoke in working areas and

provide adequate ventilation in order to avoid vapours accumulations.

The composition of the product is not toxic, but skin and eye contact must be avoided. Safety goggles and protective gloves should be used during application. In case of skin contact, wash affected areas with soap and water. In case of eye contact,

rinse thoroughly with clean water but do not rub. Seek medical attention if irritation persists.

Safety Data Sheet of **MAXELASTIC® TRANS** is available by request.

Disposal of the product and its empty packaging must be made by the final user and according to official regulations.

## TECHNICAL DATA

| Product characteristics   |   |                         |
|---|---|-------------------------|
| CE Marking, EN 1504-2   |   |                         |
| Description. Transparent, elastomeric liquid membrane for protection of concrete.   |   |                         |
| Coating (C).  |   |                         |
| Principles/Methods. Protection against ingress with coating (Principle 1-PI / 1.3) and Moisture control with coating (Principle 2-MC / 2.2) |   |                         |
| Appearance and colour   | Transparent liquid, homogeneous and monocomponent |                         |
| Density, ISO 1675 (g/cm <sup>3</sup> )  | 0,99 ± 0,10                                       |                         |
| Application and curing conditions   |   |                         |
| Minimum temperature / Relative humidity during application (°C/%)   | Ambient:<br>> 5 / <85                             | Substrate:<br>> 5 / < 5 |
| Waiting time between coats at 20°C, (h)   | 10-12   |                         |
| Drying time, 20°C and 50 % R. H., (h)   | 24  |                         |
| Total curing time at 20°C and 50 % R.H.   |   |                         |
| - Pedestrian traffic, (d)   | 3   |                         |
| - Permanent immersion or flooding test, (d)   | 7   |                         |
| Cured product characteristics   |   |                         |
| Permeability to CO <sub>2</sub> , EN 1062-6. S <sub>D</sub> (m)   | 343   |                         |
| Vapour water permeability, EN-ISO 7783-2<br>V (g/m <sup>2</sup> -d) / S <sub>D</sub> (m)  | 13,63 / 1,57                                      |                         |
| Liquid water permeability, EN 1062-3. w (kg/(m <sup>2</sup> ·h <sup>0,5</sup> ))  | 0,004   |                         |
| Bond strength by pull-off EN 1542 (MPa)   | 2,71  |                         |
| Tensile strength & Elongation at break, ASTM D-412 (MPa/%)  | 20,3 / 320  |                         |
| Consumption*  |   |                         |
| Consumption per coat / Total application, (kg/m <sup>2</sup> )  | 0,5-0,6 / 1,0-1,2                                 |                         |

\* Consumption may vary depending on the roughness, porosity and other conditions for both tile and surface. A preliminary test on-site will determine the coverage exactly.

## GUARANTEE

The information contained in this leaflet is based on our experience and technical knowledge, obtained through laboratory testing and from bibliographic material. **DRIZORO®**, **S.A.U.** reserves the right to introduce changes without prior notice. Any use of this data beyond the purposes expressly specified in the leaflet will not be the Company's responsibility unless authorised by us. We shall not accept responsibility exceeding the value of the purchased product. The data shown on consumptions, measurement and yields are for guidance only and based on our experience. These data are subject to variation due to the specific atmospheric and jobsite conditions so reasonable variations from the data may be experienced. In order to know the real data, a test on the jobsite must be done, and it will be carried out under the client responsibility. We shall not accept responsibility exceeding the value of the purchased product. For any other doubt, consult our Technical Department. This version of bulletin replaces the previous one.