

Single-component PU-bitumen waterproofing membrane for unexposed applications (foundations)

DESCRIPTION

Impermax GC is an easy to apply, high solids, solvent-based polyurethane-bitumen, quick moisture-cured resin, that, upon polymerization, forms a rubber-like waterproofing elastomeric membrane able to bridge-over the fissures of the support.

APPLICATION

Impermax GC is designed for the waterproofing of unexposed surfaces, particularly the foundations of buildings (concrete supports). Concrete masonry units and plywood are both acceptable substrates. Vertical and horizontal surfaces. New build or refurbishment projects.

ADVANTAGES

- Seamless, high elastomeric, fully bonded, weather resistant membrane.
- Can be directly applied to "green" or damp concrete without priming.
- Thick membrane can be applied in a single coat without priming.
- Rapid curing.
- May be catalysed with water to speed up cure times especially in cold temperatures and low relative humidity.
- Resistant to root penetration.

CERTIFICATIONS

- Root resistance according to CEN/TS 14416:2014

TECHNICAL DATA

PRODUCT INFORMATION BEFORE APPLICATION

Chemical description	Solvent borne, moisture-cured single-component aromatic polyurethane
Physical state	Liquid
Packaging	Metal container: 25 kg
Non-volatile content (%)	75%
Flash Point	45°C (ASTM D 93)
Available colours	Black
Density	1.2 g/cm ³ (20°C)
Viscosity	8000-25000 mPa.s (s64, 50 rpm, 23°C)
VOC	310 g/l
Pot life	8-12 hours (1kg, 20°C, 50%hr)
Storage	Keep at a temperature below 30°C, away from ignition sources and moisture
Use before	Product may be used up to 12 months after manufacture in its sealed original container.

INFORMATION ON THE FINAL PRODUCT

Final appearance	Solid, soft, continuous elastomeric membrane
Hardness Shore	80A
Mechanical properties	Elongation: 700% Tensile strength: 1.2 MPa
Adhesion	2,4 MPa over damp concrete 2.0 MPa over dry concrete

SUPPORT REQUIREMENTS

To achieve a good adhesion, support must be:

1. Flat and levelled
2. Compact and cohesive (pull off test must show a minimum resistance of 1,5 N/mm²).

3. Even and regular surface. Total continuous.
4. Free from cracks and fissures. If any, they must be previously repaired.
5. Clean and preferably dry, free of dust, loose particles, oils, silicones, organic residues, or laitance.

RECOMENMENDED ENVIRONMENTAL CONDITIONS

Support temperature should be between 5°C and 40°C.

MIXING AND APPLICATION GUIDELINES

Stir and gently homogenise the resin before use (low speed electrical mixer), some of the contents settle down during at long-term storage and must be redispersed. Allow some minutes to release air bubbles.

If needed, the resin may be thinned with up to 10% Rayston Solvent, for a viscosity adjustment. Never use universal or unknown composition solvents (like white spirit or solvents containing alcohols).

Apply by roller, brush or spreader. No primer is needed.

A single layer of up to 3 kg/m² can be applied over a horizontal surface, in this way the application will be speed up without losing the performances of the coating. Over a vertical support, several layers will have to be applied to avoid sagging of the resin.

It can also be applied in multiple lifts, up to 6 kg/m² when a maximum protection is required.

It is strongly recommended to use entirely the product in the container. If there is some product left, ensure it is completely sealed after use.

Use a spiked roller to crash bubbles and help to distribute the product better over the surface.

The cure rate of Impermax GC may be accelerated by adding clean water (bottled or tap). Add maximum 0,6 % in weight. Mix the material by producing a vortex close to the surface of the pail and add the water. Following the addition of water, continue mixing the membrane to evenly disperse the added water for up 1 minute. Exceeding this time of mixing may result in introducing an excessive amount of air in the membrane. Exceeding the recommended % of water, may result in a reduction of working time.

CURING TIME

8 hours (20°C). May depend on the thickness of the layer, the relative humidity, the air temperature and/or the presence of direct sunlight.

RETURN TO SERVICE

At usual conditions (20°C), after 24 hours

TOOL CLEANING

Liquid Impermax GC may be cleaned with Rayston Solvent, acetone, and alcohols. Once hardened Paint Stripper K can be used.

SAFETY

Please refer to the Material Safety Data Sheet

ENVIRONMENTAL PRECAUTIONS

Empty containers must be handled taking the same precautions as if they were full. Containers must be considered as hazardous waste, to be transferred to an authorized waste manager. If there is some residual product in the containers, do not mix it with other substances without checking for possible dangerous reactions.



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OTHER INFORMATION

The information contained in this Technical Data Sheet, as well as our advice, both written as verbal or provided through testing, are based on our experience, and they do not constitute any product guarantee for the installer, who must consider them as simple information.

We recommend to study deeply all information provided before proceeding to the use or application of any of our products, and strongly advise to conduct tests "on-site" in order to determine their convenience for a specific project.

Our recommendations do not exempt of the obligation of installers to deeply study the right application method for these systems before use, as well as to conduct as many preliminary tests as possible should any doubt arise. The application, use and processing of our products are beyond our control, and therefore under the exclusive responsibility of the installer. In consequence, the installer will be the only responsible of any damage derived from the partial or total in-observation of our indications, and in general, of the inappropriate use or application of these materials.

This Data Sheet supersedes all previous versions.