

# MPU P04N EPOXY RESIN PRIMER



## DESCRIPTION:

Two components, high performance, solvent-free coating liquid, odorless, with epoxy resin as the main component (part A) and curing agent (part B). It is specially designed to be used as the primer and to provide exceptional adhesion, corrosion resistance, and surface preparation for substrates prior to the application of MPU waterproofing systems and flooring system topcoats.

## FEATURES:

### Low Viscosity & Deep Penetration:

**P04N** is designed with a low-viscosity formulation, enabling strong penetration into concrete or other porous substrates for enhanced bonding and surface preparation.

### Effective Sealing & Moisture Barrier:

**P04N** provides exceptional sealing properties, effectively insulating moisture to minimize bubble and pinhole formation in the polyurea coating.

### Strong Chemical Bonding with Polyurea:

**P04N** chemically bonds with polyurea, creating a robust adhesion between the concrete substrate and the polyurea layer, ensuring long-term performance and durability.

## RECOMMENDED USES:

on the substrates of new-built and old cements, such as the substrates of bridges, car parks, walkways, production facility, playgrounds and other concrete surfaces.

NOTE: call our technical department about the application to other substrates or situations.

## DESIGN CRITERIA:

- The primer is designed for application in one coat. However a second coat may be required on porous concrete surfaces.

## APPLICATION METHOD:

Previous preparation of the substrate according to its type.

Existing holes or areas with a lack of material must be repaired. General cleaning of the substrate, removing existing dust, dirt, grease or efflorescence. The substrates must be resistant and cohesive. Check the maximum degree of moisture permittivity of the substrate.

Mix and stir the components using a mechanical shaker for approximately 4-5 minutes (medium speed). Apply the resin in thin crossed coats until the desired planimetry is achieved. Consumption between 0.1 and 0.2 g/sqm depending on the roughness of the substrates.

NOTE: For other types of substrates, weather conditions or final use, consult our technical department

# TDS. TECHNICAL DATA SHEET



## TECHNICAL DATA:

NO.	ITEM	VALUE
1	The weight of component A	20kg
2	The weight of component B	10kg
3	The total weight of A + B	30kg
4	Density of mixed resin	1.1kg/l @23 °C
5	Volume ratio of cured components	Appr. 100%
6	Weight ratio of cured components	Appr. 100%
7	Shore D	Appr. 60 - 70 (14 days / +23 °C)
8	Adhesive Tensile Strength	1.5 N/mm <sup>2</sup> (concrete failure) > 3.0 N/mm <sup>2</sup> (aluminum, steel)
9	Mixing ratio (in weight)	2:1
10	Theoretical Coverage	0.15 kg = 1 sqm = 0.1mm
11	Ambient atmospheric temperature	Minimum +10 °C / Maximum +30 °C
12	Relative humidity of air	Maximum 80% relative humidity
13	dew point	The substrate should be at least 3° above the dew point to reduce the risk of condensation and floor cracking.
14	Substrate temperature	Maximum 80% relative humidity
15	Water content of the substrate	< 4% pbw
16	Operating time	10 °C @25min 20 °C @20min 30 °C @15min
17	Curing time	10 °C, 24 hours ~ 48 hours 20 °C, 12 hours ~ 24 hours. 30 °C, 8 hours ~ 16 hours.

## CONSTRUCTION NOTES:

### Mixing Ratio:

- The weight ratio of Component A to Component B is 1:1 (A:B).

### Mixing Instructions:

- Mix the components thoroughly for 3–5 minutes manually or mechanically, until a uniform consistency is achieved.
- The mixed primer must be applied within 30 minutes using a roller or brush.
- NOTE: Do not add any thinning agents or foreign materials to the primer.

### Application Timing:

- The next process (e.g., topcoat application) should be conducted after the primer becomes tack-free.
- If the next process is delayed beyond 24 hours after the tack-free time, an additional coat of primer must be applied.
- Reapply the primer if rain or adverse weather conditions occur after the initial application.



# TDS. TECHNICAL DATA SHEET

## HEALTH AND SAFETY:

### **Respiratory Protection:**

When handling or spraying, always use an air-purifying respirator to protect against inhalation of harmful substances.

### **Skin Protection:**

Wear rubber gloves and remove them immediately if they become contaminated. Ensure your body is fully covered with clean, protective clothing. After completing work, and before eating, drinking, or smoking, wash thoroughly with soap and water.

### **Eye/Face Protection:**

Wear safety goggles to prevent splashes or exposure to airborne particles.

### **Waste Management:**

Minimize or avoid waste generation whenever possible. If waste is produced, incinerate it under controlled conditions in compliance with local and national regulations.

### **Re-occupancy Guidelines:**

Do not re-enter the work area without respiratory protection for at least 24 hours after spraying, ensuring proper ventilation is maintained.

### **Compliance:**

Contractors and applicators must adhere to all applicable storage, safety, and handling guidelines. These safety measures are critical during the implementation process, as well as before and after exposure to loading machinery.

### **Waste Disposal:**

Dispose of all waste in accordance with state and/or local regulations.

These precautions are essential to ensure the health and safety of all individuals involved in the process

## RECOMMEND TOOLS:

The product can be applied manually using methods such as: trowel or scraper application, brushing with a short-bristle brush, or roller coating with a durable, short-nap roller. For a more efficient and even application, specialized spraying equipment can also be used.

## RECOMMEND USAGE:

Normally, it is about 0.15 -0.25kg /m<sup>2</sup> , and the thickness of one-time construction is about 0.1-0.2 mm.

## PACKING:

Component A, 20kgs/pail,

Component B, 10 kgs/pail or 5 kg + 5 kg per pail.

## STORAGE AND TRANSPORTATION:

The primer should be sealed and stored in a dry, cool, and well-ventilated area, away from direct sunlight, rain, and any sources of fire.

When kept in its original packaging and under the prescribed storage conditions, the product has a shelf life of 6 months from the date of production.

After opening the drum, please use the product as soon as possible and reseal the container when not in use.

The materials should be stacked stationary and handled carefully during transportation to avoid any violent collisions.

### **DISCLAIMER:**

The information provided in this Technical Data Sheet (TDS) 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. We warrant that our products will meet our written liquid component specifications. The customers are advised to conduct their own tests and evaluations to ensure suitability for their intended application. Always follow local regulations, safety guidelines, and manufacturer recommendations.