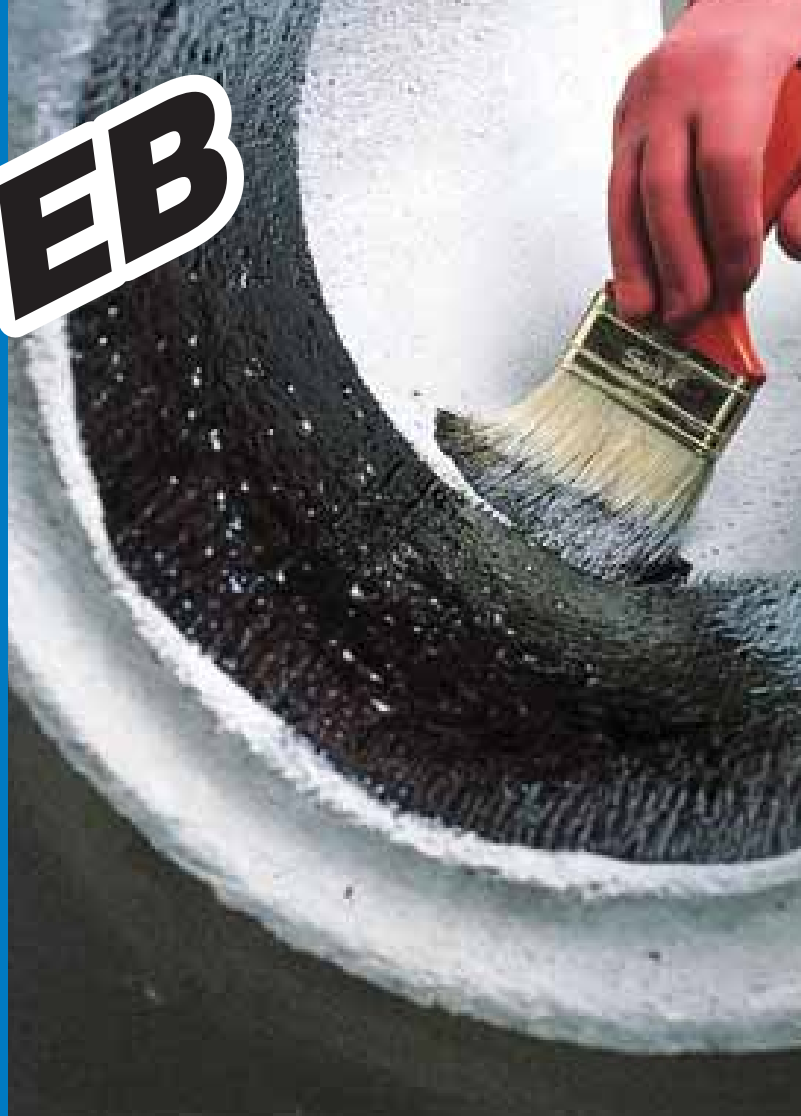




# Duresil EB

**Epoxy modified paint with hydrocarbon resins for anti-acid protection of concrete and steel surfaces**



## WHERE TO USE

For the protection of sewage treatment plants, cisterns and concrete sewer pipes in contact with aggressive chemicals such as acids, alkalis, hydrocarbons, detergents and sewage.

### Some application examples

- Anti-acid protection of sewage treatment tanks.
- Anti-acid protection of sewer mains.
- Coating of recycling tanks for oils and hydrocarbons.
- Reserve tanks.
- Safety reserve tanks.
- Drain wells.
- Anti-corrosive coating of sandblasted steel surfaces.
- Protection of reinforced concrete and steel exposed to salt air.

## TECHNICAL CHARACTERISTICS

**Duresil EB** is a two-component epoxy modified paint based on hydrocarbon resins and special additives manufactured to a formula developed in the MAPEI Research and Development Laboratories.

Once it hardens completely, **Duresil EB** is resistant to acids, alkalis, salts, oils, and hydrocarbons, as shown in Table 1.

The hardened **Duresil EB** film is designed for contact with sewage and can be used for the protection of sewage treatment tanks and sewer mains.

**Duresil EB** is also resistant to frost and sunlight, and creates a vapour barrier.

## RECOMMENDATIONS

- Do not use **Duresil EB** on damp surfaces.
- Do not dilute **Duresil EB** with water. For spray applications, nitrosolvent or white spirits may be used as needed.
- Do not use **Duresil EB** when rain threatens.
- Do not use **Duresil EB** at temperatures below +5°C.
- Do not use **Duresil EB** on friable, damp or dusty substrates.
- Do not use **Duresil EB** on substrates subject to rising damp (consult MAPEI's Technical Service);
- Do not use for surfaces in contact with drinking water (use **Mapecoat I 24**).

## APPLICATION PROCEDURE

### Substrate preparation

Substrates must be thoroughly clean, solid, and dry. Completely remove loose materials, dust, traces of formwork, release agents, paints and varnishes by sandblasting.

| TECHNICAL DATA (typical values)                     |   |                             |
|---|---|-----------------------------|
| INDICATIVE DATA OF THE PRODUCT                      |   |                             |
|   | Comp. A   | Comp. B                     |
| <b>Colour:</b>                                      | black   | black                       |
| <b>Consistency:</b>                                 | fluid paste   | fluid paste                 |
| <b>Density (g/cm<sup>3</sup>):</b>                  | 1.75  | 1.45                        |
| <b>Brookfield viscosity (mPa·s):</b>                | 11 000<br>(rotor 6 - RPM 20)  | 2 800<br>(rotor 4 - RPM 20) |
| <b>Dry solid content (%):</b>                       | 100   | 100                         |
| <b>Hazard classification according to EC 99/45:</b> | irritant, dangerous<br>to the environment<br>Before using refer to the "Safety instructions for the<br>preparation and application" paragraph and the<br>information on the packing and Safety Data Sheet | irritant                    |
| <b>Storage:</b>                                     | 12 months in original packaging   |                             |
| <b>Customs class:</b>                               | 2715 00 10  |                             |
| APPLICATION DATA at +23°C and 50% R.H.              |   |                             |
| <b>Mixing ratio:</b>                                | A : B = 1 : 1   |                             |
| <b>Colour (A+B):</b>                                | black   |                             |
| <b>Density of the mix (kg/m<sup>3</sup>):</b>       | 1 560   |                             |
| <b>Viscosity (A+B) (mPa·s):</b>                     | 3 600<br>(rotor 6 - RPM 20)   |                             |
| <b>Open time:</b>                                   | 40-50 minutes   |                             |
| <b>Setting time:</b>                                | 5-6 hours   |                             |
| <b>Complete hardening:</b>                          | 48 hours  |                             |

| CHEMICAL RESISTANCE OF DURESIL EB AT +23°C                    |            |              |
|---|------------|--------------|
| CHEMICAL PRODUCTS   | CONTACT    |              |
|   | CONTINUOUS | INTERMITTENT |
| Water   | +          | +            |
| Acetic Acid 10%   | -          | +            |
| Hydrochloric Acid 10%   | +          | +            |
| Lactic Acid 10%   | +          | +            |
| Nitric Acid 10%   | -          | +            |
| Nitric Acid 50%   | -          | -            |
| Oleic Acid 10%  | +          | +            |
| Caustic Soda 30%  | +          | +            |
| Sodium Hypochlorite (64 g/l of active chlorine)               | +          | +            |
| Sulphuric Acid 50%  | +          | +            |
| Diesel oil  | +          | +            |
| Ethyl Alcohol   | -          | -            |
| Xylene  | -          | -            |
| Toluene   | -          | -            |
| + Excellent resistance                      - Poor resistance |            |              |

Fill any cracks and repair degraded sections with **MapegROUT T40**. Seal and level any irregularities in the substrate with **Mapectin**, fine finishing mortar.

**Duresil EB** should be applied after the substrate and any repairs made with cement-based mortars have completely cured.

For steel surfaces always sandblast with silica sand graded up to SA 2<sup>1/2</sup> or clean mechanically (ST3).

#### **Mixing**

**Duresil EB**'s two components must be mixed together. Pour part B (hardener) into part A (resin) and mix at low speed with a mechanical stirrer until completely homogenised. Avoid using partial quantities of material from the package in order to prevent measuring errors that could interfere with the complete hardening of the **Duresil EB**.

#### **Application**

**Duresil EB** can be applied using conventional techniques, brush, roller or spray, in at least two coats. Wait from 6 to 24 hours between coats, depending on ambient conditions. If the viscosity must be lowered to facilitate spray applications, dilute **Duresil EB** with 5-10% of nitrosolvent or white spirit.

#### **Maintenance**

Surfaces treated with **Duresil EB** can be cleaned with water and detergent.

#### **Cleaning**

Before it hardens, **Duresil EB** can be removed from brushes, rollers or sprayers with nitrosolvent or white spirits.

#### **CONSUMPTION**

400 to 450 g/m<sup>2</sup> per coat for a thickness of approx. 250 µm.

#### **PACKAGING**

**Duresil EB** is available in 10-kg units consisting of 5 kg of part A and 5 kg of part B.

#### **STORAGE**

Store in a dry place, far from sources of heat and open flames, at a temperature of between +5°C and +30°C.

#### **SAFETY INSTRUCTIONS FOR THE PREPARATION AND APPLICATION**

**Duresil EB** can cause skin irritation. Gloves and protective eyewear should be used while mixing and applying the product. When used in confined areas with poor ventilation, take precautions to provide adequate ventilation. Keep away from open flames and do not smoke. In case of contact with eyes, wash thoroughly with water and consult a doctor. **Duresil EB** part A is dangerous to aquatic organisms. Avoid release to the environment.

FOR PROFESSIONALS.

#### **WARNING**

*Although the technical details and recommendations contained in this report correspond to the best of our knowledge and experience, all the above information must, in every case be taken as merely indicative and subject to confirmation after long-term practical applications; for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application. In every case, the user alone is fully responsible for any consequences deriving from the use of the product.*

**All relevant references  
of the product are available  
upon request**

