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a.b.e.® Construction Chemicals

# dura.®bond GP

## General Purpose

### SINGLE-PACK ACRYLIC EMULSION, BONDING AND CURING AGENT

#### DESCRIPTION

**dura.®bond GP** is a modified, single-pack acrylic emulsion which is milky in colour.

#### USES

- As a primer/bonding medium for cementitious repairs to concrete elements in both internal and external applications.
- Typically used with **dura.®rep GT, HS, FR** and **FS** range of repair systems where normal or high build applications are required in vertical, horizontal or overhead locations.
- **dura.®bond GP** is an excellent curing compound for repairs carried out in both internal and external applications.
- **dura.®bond GP** is not suitable for repairs that will be subjected to continuous immersed conditions. For structural bonding, where the bond strength is to be equal or greater than the tensile strength of the parent concrete, use **epidermix 344** or **345**.

#### ADVANTAGES

- Ease of application, single component product with a long open time.
- Resistant to hydrolysis – alkali stable.
- Economical
- Suitable for internal & external applications.
- One product - used as a bonding agent and curing compound.
- Bond strengths between repair mortar and concrete are excellent.
- Excellent curing properties.
- Compatible with our **dura.®cote** range of protective coatings.
- Non-toxic.

#### SURFACE PREPARATION

The substrate must be clean, sound, and free of any oil, grease, loose particles, cement laitance and other contaminants. Should compressed air be employed, ensure that the air is clean and oil free. All edges to be repaired must be square-cut to a minimum of 10 mm deep, perpendicular to the surface, followed by the removal of all unsound material to a minimum depth as prescribed in the product selected for the repair. A sound exposed aggregate surface is recommended. Never feather edge the repair products. The substrate must be well dampened, with no free water on the surface prior to applying **dura.®bond GP**.

#### TYPICAL PHYSICAL PROPERTIES

Type	Liquid acrylic emulsion
Colour	Milky
Minimum film forming temperature (MFT)	±11 °C
Typical solids content	±47%
Density (typical)	1.060 g/cm <sup>3</sup>
pH value	±10
Solvent resistance	Not Resistant
Water resistance	Very high (nevertheless do not use in permanent immersion applications)
Freeze/thaw cycles	Not stable

#### COVERAGE

**dura.®bond GP** applied as

1. Priming/bonding agent: 4 to 6 m<sup>2</sup>/litre
2. Curing compound: ±5 m<sup>2</sup>/L

**Note:** Wastage and irregular surface profiles will reduce the practical coverage rates.

#### APPLICATION

##### For priming/bonding

The prepared surface is to be thoroughly saturated using clean water prior to applying **dura.®bond GP**. The surface saturation is generally carried out 1 to 2 hours before application but may require more depending on the substrate porosity, temperature and wind conditions. All excess free water must be removed. A saturated surface ensures ease of product spread and application, and reduces suction caused by porous substrates resulting in good bonding properties.

**dura.®bond GP** is applied to the surface, at the recommended application rate, using a stiff-bristle brush ensuring that the total area of repair is thoroughly coated. Care should be taken not to apply excessive amounts i.e. pooling and ponding must be avoided as this could result in the repair mortar 'hogging' or slipping on the surface, resulting in cracking and or poor adhesion.

Immediately apply the repair mortar while the primed surface is still tacky and finish off accordingly. Should the **dura.®bond GP** surface dry, then a second bond coat must be applied to receive the repair mortar. Drying may occur in 3 to 4 hours at 25 °C but may vary subject to wind conditions.

**For curing the repair mortar** **dura.®bond GP** is applied by brush to the entire repaired area at the recommended coverage rate for optimum performance. The application must commence as soon as the surface will not be marred by brushing and have an unbroken film to provide a high curing efficiency. Note: For bonding and curing, **dura.®bond GP** must be applied neat and must not be diluted. All equipment, paint trays or containers, must be clean.

## CLEANING

Clean tools and equipment with water before the material hardens.

## PROTECTION ON COMPLETION

In rapid drying conditions caused by high winds or direct sunlight additional precautions should be included, like sealing with polythene sheeting having the edges taped down. This may include damp hessian behind the sheeting to prevent moisture loss. Similarly in cold conditions, the repaired area must be protected from freezing. For additional protection properties, **dura.®bond GP** is fully compatible with the **dura.®cote** range of protective coatings and may be over coated as required.

## TEMPERATURE AND RELATIVE HUMIDITY

Surface and ambient temperature must be at least 5 °C and growing, ideally between 20 °C and 30 °C.

## MODEL SPECIFICATION

**Acrylic bonding/curing agent for use with dura.®rep repair mortars.**

The bonding agent will be **dura.®bond GP**, an acrylic bonding and curing agent and will be applied in accordance with the recommendations of **a.b.e.® Construction Chemicals**.

## PACKAGING

**dura.®bond GP** is supplied in 25 L plastic containers.

## HANDLING & STORAGE

This product has a shelf life of 12 months if kept in a dry cool place in the original packaging. In more extreme conditions this period might be shortened. **dura.®bond GP** must be protected from freezing during storage. Product which has been allowed to freeze at any stage must be discarded.

## HEALTH & SAFETY

Cured or wet **dura.®bond GP** is non-toxic, non-flammable and slightly alkaline. Always wear gloves, eyewear and protective clothing when working with the material and avoid excessive inhalation, ingestion and skin contact. If material is splashed in the eye, wash off with clean water and seek medical attention.

## IMPORTANT NOTE

This data sheet is issued as a guide to the use of the product(s) concerned. Whilst **a.b.e.® Construction Chemicals** endeavours to ensure that any advice, recommendation, specification or information is accurate and correct, the company cannot - because **a.b.e.®** has no direct or continuous control over where and how **a.b.e.®** products are applied - accept any liability either directly or indirectly arising from the use of **a.b.e.®** products, whether or not in accordance with any advice, specification, recommendation, or information given by the company.

## FURTHER INFORMATION

Where other products are to be used in conjunction with this material, the relevant technical data sheets should be consulted to determine total requirements. **a.b.e.® Construction Chemicals** has a wealth of technical and practical experience built up over years in the company's pursuit of excellence in building and construction technology.

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