

# **TECHNICAL DATASHEET**

Specially Formulated 2-Part, Strength Epoxy Bonding Agent

High



#### PRODUCT INTRODUCTION

ASCOBOND EP is high-strength, solvent free epoxy bonding agent specially formulated for new concrete with old concrete bonding or mixing with dry sand to make repair mortar. ASCOBOND EP is 100% solid and modified epoxy resin adhesive.

Confirms to ASTM C-881 Type I, II, IV & V, Grade 2, Class-B and Class-C.

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#### **KEY FEATURES**

- 1. Excellent adhesion.
- 2. Low shrinkage.
- 3. Bonds a wide variety of materials.
- 4. High pull off strength and inherent strength.
- 5. Excellent bond.
- 6. Moisture insensitive.
- 7. Improve set and cure times.
- 8. Chemical & abrasion resistant.
- 9. Non-toxic.

#### RECOMMENDED APPLICATIONS

- 1. Bonding materials such as concrete, masonry, stone, wood, metal, etc.
- 2. Bonding new plastic concrete to existing concrete or steel.
- 3. Binder for epoxy repair mortar to patch or overlay horizontal surfaces.
- 4. Gravity feed of cracks in horizontal concrete and wood surfaces.
- 5. Anchoring dowel bars, tie bars, bolts, etc. in horizontal surfaces.
- 6. Machinery base plate grout.

### **TECHNICAL PROPERTIES**

Chemical base	Smooth paste, Epoxy resin and hardener (1:1)
Mixing ratio	1:1 (A:B)
Pot life	35 – 45 minutes
Appearance/Color	Pale Yellow/ Clear
Set to touch dry	2 - 3 hour
Full cure	7 days
Compressive strength	$\geq$ 60 ± 5 N/mm <sup>2</sup> @ 7 Days (ASTM C: 579, IS 9162)
Tensile Adhesion with Concrete	≥ 3.5 N/mm² @ 7 Days (ASTM C: 881)
Pull Out Bond Strength with Concrete	≥ 5.00 N/mm² @ 7 Days (ASTM C: 881)
Shear Bond Strength	Concrete failure (ASTM C: 881)



#### **APPLICATION METHODS:**

#### 1. Surface Preparation

The surface must be clean and structurally sound. Oil and grease must be removed from surface. Weak concrete to be removed to expose blowholes & voids. Dust, loose and friable material should be removed from surface before product application by brush or vacuum. The tensile strength substrate's surface should be 1.0 N/mm² followed by compressive strength of 25 N/mm².

### 2. Mixing

Only mix the amount of material that can be used within pot life. Stir or shake part-A until pigment dispersion. Add part-B hardener and stir thoroughly for 3-5 minutes to attain homogenous mix by using a low speed electric stirrer of 300-400rpm or by other suitable equipment.

Mixing ratio (A:B) 2:1 parts by weight.

## 3. Application

When the mixture is ready to use, apply it in full to surface and spread it using suitable tools. It can be easily applied with putty knife or brush.

#### 4. Condition for Use

The weather temperature should be between  $+8^{\circ}$ C &  $+35^{\circ}$ C. The working time should be approximately 35 minutes (for batch size 1.5 kg) under  $+27^{\circ}$ C.

#### 5. Coverage

Approximately 25 to 35 ft<sup>2</sup> / Kg per coat. This coverage is based on application by roller/brush on a smooth surface in optimum conditions.

#### 5. Cleaning

Tools and equipment should be cleaned after use with appropriate solvent.

#### 6. Packing

It is available in 1 Kg packing.

#### 7. Storage and Shelf Life

12 months from the date of manufacturing if stored in original sealed container and in cool, dry condition, protected from frost. Do not expose to direct sunlight.

#### 8. Disposal

Access/Larger quantities of leftover product should be disposed off in original container. Completely empty, clean containers should be recycled. Do not dispose off with household waste. Do not allow it to enter into sewage system or do not empty into drains.

#### DISCLAIMER:

While the technical details & recommendations contained in this document and the related details given by the representatives of the company correspond to the best of our knowledge & experience, all the above information must in any case be considered as merely indicative and subject to confirmation. Users are recommended to conduct a product suitability test before it is used at full scale. In any case, the consumer alone is entirely liable for any consequences resulting from using the product. For the most up-to-date TDS, please visit our website at www.ascolite.in. Our company policy is one of ongoing R&D; therefore, we reserve the right to update this information without prior notice at any time. As the correct identification of the problems, the quality of other materials used, on-site environmental conditions and the workmanship on-site are factors beyond our control, there is no express or implied guarantee/warranty as to the results achieved. The company assumes no liability or consequential damage arising from the use of our products for unsatisfactory results. Site visits are not a supervisory responsibility wherever provided. Suggestions made either verbally or in writing by the company may be followed, modified or rejected by the owner, engineer or contractor, since they are solely responsible for carrying out procedures appropriate to a specific application.

