

# PRODUCT DATA SHEET E-BOND 106 POLYAMIDE EPOXY COATING

# FOR PROFESSIONAL USE ONLY; NOT FOR SALE TO OR USE BY THE GENERAL PUBLIC

#### FLAMMABLE / COMBUSTIBLE

E-Bond 106 Series of Epoxy Coatings are based on Epoxy Resins, which when combined with the hardener, form tough, cross-link, thermal-set films similar to the properties of a baked finish without heat. These specially formulated coatings provide excellent resistance to impact, abrasion and chemical attack, as well as fresh or sea water immersion.

#### **FEATURES**

- Excellent flexibility and impact resistance.
- Good resistance to concentrated alkalies and diluted acids.
- Excellent durability and resistance to corrosion, rust, abrasion, sewage brine, oils and greases.
- Outstanding resistance to a wide range of chemicals.
- Excellent adhesion to both ferrous and non-ferrous surfaces.
- Extended Pot Life.

#### TYPICAL USES OF E-BOND 106 SERIES EPOXY COATINGS

- Automobile display rooms.
- Aircraft maintenance hangars.
- Restaurant kitchens and traffic areas.
- Carport and garage floors.
- Marine Sealing / Coating
- May be applied to wood, polyester, steel or concrete.

# SURFACE PREPARATION

**STEEL.** In general, the more severe the anticipated exposure, the more thorough the surface preparation must be. Commercial grade sand or grit blasting is recommended. An alternative suggestion to remove grease, dirt, rust, and scale use a solvent wash (carbon tetrachloride, acetone, etc.), combined with wire brushing.

Metal Surfaces which are treated with an acid for cleaning must be neutralized by flushing with clean water, then with a solution of 1 cup of ammonia to 1-1/2 gallons of water.

For an immersion service, white metal blast cleaning is necessary.



E-Bond Epoxies, Inc. P.O. Box 23069 / 501 N.E. 33<sup>rd</sup> Street Fort Lauderdale, FL 33307 Toll Free: 877-265-0011 Phone: 954 566-6555 Fax: 954 566-6663

E-Mail: info@ebondepoxies.com

**CONCRETE.** All surfaces must be structurally sound, clean and free of dirt, dust, oil, grease, or any contaminant that would adversely affect the bond.

**NEW CONCRETE.** New concrete that has been thoroughly cured must either be sandblasted lightly or acid etched. (See OLD CONCRETE SECTION FOR FURTHER DETAILS.) Scrub acid solution into concrete surface to obtain a lightly granular effect.

**OLD CONCRETE.** All loose particles or soft, weak sections must be removed with detergents or other cleaning materials. When grease or oil are present, special techniques must be used to remove these contaminants before any coating may be applied.

When using acid with water, use approximately 1 part of muriatic acid to 3 to 5 parts of water as required. <u>FOLLOW SAFETY PRECAUTIONS WHEN USING ACIDS</u>. Pour on the surface in an even manner and thoroughly scrub until bubbling ceases. Scrub acid solution into concrete surface to obtain a lightly granular effect. Thoroughly rinse and scrub with clean water to remove all acid residue, etc. <u>CAUTION MUST BE USED WHEN USING ACID.</u> Wear rubber gloves and protective coating. After rinsing with clear water, a neutralizing wash consisting of a commercial grade ammonia and water is recommended. Thoroughly wash away all residue of ammonia with clean water, and allow to dry.

**WOOD.** Thoroughly clean wood surfacaes of greases, oil, wax, soap, etc. See "Precautions."

**FIBERGLASS.** Surfaces must be free of oil, grease, wax, and mold lubricants. Light sanding and a solvent wash should remove most foreign material from fiberglass.

#### **MIXING**

E-BOND 106 is a two component material consisting of Epoxy Resin (Component A) and Hardener (Component B) furnished in two containers. TWO PARTS, MARKED A AND B MUST BE MIXED TOGETHER IN EQUAL VOLUMES BEFORE THIS PRODUCT IS READY FOR USE.

- 1. Stir contents of EACH CAN before blending with a separate stirrer.
- 2. Blend an equal volume of Component A with an equal volume of Component B.
- 3. Stir and blend thoroughly. Allow the mixed material <u>TO STAND FOR 60 MINUTES TO 90 MINUTES BEFORE USE.</u> Stir again before use. Mixing time is based on material that has been allowed to warm to room temperature of approximately 70° F to 75° F.

#### APPLICATION CONSIDERATIONS

An unusual phenomenon of a variance in shades may occur while rolling the 106. To avoid this it is recommended that the product is NOT backrolled. Roll in a forward direction then lift the roller and roll in the same direction.

#### Possible Blistering and Surface Coating Defects

Many defects in high solids coatings occur during the application process where most of the defects may be attributed to the applicator. Improper mixing of the material may induce air into the coating of the material and the resultant applied film.

Poor substrates, primarily concrete surfaces, are susceptible to outgasing, the spontaneous discharge of moisture, vapor, or air. Outgasing causes bubble to appear in the coating. This incident is especially common when high-solids materials, applied to cool surfaces that will be become warmer before the initial cure of the material. The bubbles that result in outgasing often can be corrected or mitigated during application by back rolling using a porcupine roller or by adjusting the coating schedule so the material will be applied when the surfaces are cooling off (in the evening and at night). Outgasing may also occur on coated cast iron, porous aluminum surfaces, etc.

#### **APPLICATIONS**

E-BOND 106 Epoxy Coating may be applied by brush, spray, or roller as received normally without further thinning. Should thinning be desired, use only E-BOND S-6 REDUCER. Other thinners may render the coating useless. When spraying, a mist coat should be applied first, followed by a full hiding coat normally within 20 to 30 minutes at 70° F. Should a second full coat be required, this may be applied after 4 hours, depending on temperature.

Brush or roller application should be allowed to dry overnight before a second coat is applied.

**APPLICATION ON CONCRETE:** Properly prepared concrete surfaces, which are on grade, or in the direct rays of the sun, can normally receive two full hiding coats by brush or roller as applied without additional thinning. When placement on concrete surfaces either in the direct rays of the sun, or surfaces on grade special precautions should be taken.

For on grade concrete or applications in direct rays of the sun:

To one gallon of mixed E-BOND 106 Epoxy Coating thin approximately 25-50% with E-BOND S-6 REDUCER. Thoroughly blend Reducer until uniform consistency is obtained.

Apply the thinned coating by roller in a very thin coat. This coating should be applied approximately 400 to 500 sq. ft. per gallon. This is to be a very thin coating, allow to cure overnight.

The following day a second coat of the E-BOND 106 may be applied as it comes from the container.

SLIP-RESISTANT FINISH: After the first coat has been properly applied and allowed to cure, a second coat may be applied to obtain a Slip-Resistant Finish.

This finish may be obtained by adding approximately ½ lb. of 20/30 Silica granules to 1 gallon of E-BOND 106. The granules must be washed and kiln-dried prior to use.

Another method is to apply a full hiding coat and lightly dust 40/90 Silica granules on to the surface until no visible wet spots remain. Allow to fully cure. Brush to remove any loose granules and apply a third and final hiding coat. If the granules are very fine it may be necessary to slightly thin the final coat to obtain the non-slip characteristics.

# **COVERAGE**

For most applications depending on the porosity of the surface, coverage should range between 200-300 sq. ft. per gallon.

On concrete surfaces which are on grade, the first coat (thinned approximately 25%-50%) is to be applied at an approximate rate of 500 sq. ft. per gallon followed by a second coat at 225-250 sq. ft. per gallon.

# **EQUIPMENT**

Conventional Air Spray: Use a pressure pot with separate pot pressure atomizing air controls and any industrially rated exterior atomizing tip spray gun. Air pressure shall be 60 psi minimum with adequate volume for the gun and tip used.

Airless Spray: Use a 28:1 or 30:1 ratio pump combined with gun tip orifices of approximately .013" to .019" opening. Air pressure should be 60 psi minimum with adequate volume for the equipment used.

Brush/Brushes: USE ONLY NATURAL BRISTLE BRUSHES. Nylon or synthetic brushes may be damaged by solvents used in the product.

Rollers: Rollers should be medium nap and should be the type with a solvent resistant glue to prevent the roller from unraveling.

#### **CLEAN-UP**

Clean equipment and brushes immediately after use with E-BOND S-6 REDUCER. Clean up of spray equipment must be done as soon as possible or the chemical reaction of the coatining can lock up the equipment making it unusable.

#### \*\*\* PRECAUTIONS - WARNINGS \*\*\*

E-BOND 106 Polyamide Epoxy Coating is FLAMMABLE AND COMBUSTIBLE.

USE ONLY WITH ADEQUATE VENTILATION. Do not store with or allow contact with flames, sparks, electrical systems.

Please refer to E-BOND Epoxies, Inc. Material Safety Date Sheet for this product for additional precautionary measures.

If baking is used to obtain harder cured films, a minimum of  $\frac{1 \text{ hour flash off time}}{1 \text{ hour flash off time}}$  always must be employed prior to baking.

Do not apply material in threatening or inclement weather. Material should only be applied when ambient temperature is a minimum of 55° F and rising. E-BOND 106 should be conditioned to warm to room temperature (73° F) prior to use.

It is not recommended that E-BOND 106 be used over a previously painted surface. However, if it is deemed necessary, applicator should apply small test patches to determine the compatibility and bond in that area before proceeding with the full scale work.

# **CHEMICAL RESISTANCE**

E-Bond 106 is a high quality chemical resistant coating.

However, some of the stronger solvents, acids and chemicals, may attack the cured film. The ability of this coating to resist attack by chemicals is based on concentration of the chemicals, temperature, or prolonged contact.

Elevated temperatures increase the possibility of attack by chemicals, particularly with prolonged contact with strong solvents, acid, and alkalizers.

The applicator <u>MUST</u> run sufficient tests to determine the suitability of the coating for the intended use.

#### PRODUCT DATA

# **E-BOND 106**

TYPE: Two Component Epoxy Polyamide

FINISH: Gloss

RECOMMENDED DRY FILM BUILD PER COAT: 2.3 mils

SOLIDS BY VOLUME: Approx. 40% depending on color

THEORETICAL COVERAGE AT 2 mils: Approx. 320 sq. ft.

MIXING RATIO: 1:1 by volume

POT LIFE: 2 - 4 hours @ 75° F

APPLICATION METHOD: Brush, Roller, Conventional Air or Airless

Spray

MINIMUM APPLICATION TEMPERATURE: 50° F

THINNER: E-BOND S-6
CLEAN-UP: E-BOND S-6

PACKAGING: 1/2, 2 gal. & 10 gal. Kit

SHIPPING WEIGHT: 2 gallons 17 lbs.

10 gallons 84 lbs.

SHELF LIFE: 12 months @ 75° F

### **COMBUSTIBLE**

**CAUTION** - **For professional use only; not for sale to or use by the general public.** E-Bond's epoxies contain alkaline amines. Strong sensitizer; <u>MAY CAUSE SKIN SENSITIZATION</u> or allergic response ranging from a mild wheezing to a severe asthmatic type attack. Avoid contact with skin or eyes. <u>IN CASE OF CONTACT</u> immediately wash skin with soap and water. Flush eyes with water and obtain medical attention. Wear protective clothing, goggles, and barrier cream on all exposed skin.

**LIMITED WARRANTY NOTICE:** E-BOND EPOXIES, INC warrants this product to be free from manufacturing defects and to meet the technical properties on the current Technical Data Guide, if used as directed within the shelf life of one (1) year from manufacture date. Satisfactory results depend not only on quality products but also upon many factors beyond our control. The purchaser must examine the product when received and promptly notify E-BOND EPOXIES, INC in writing of any nonconformity before the product is used and no later than 30 days after such non-conformity is first discovered. If E-BOND, in its sole discretion, determines that the product breached the above warranty, it will, in its sole discretion, replace the non-conforming product, refund the purchase price or issue a credit in the amount of the purchase price. This is the sole and exclusive remedy for breach of this warranty.

The information in this data sheet supersedes all other sales information received by the customer during the sales process. THE FOREGOING WARRANTY SHALL BE EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND ALL OTHER WARRANTIES OTHERWISE ARISING BY OPERATION OF LAW, COURSE OF DEALING, CUSTOM, TRADE OR OTHERWISE.

E-BOND shall not be liable in contract or in tort (including, without limitation, negligence, strict liability or otherwise) for loss of sales, revenues or profits; cost of capital or funds;

business interruption or cost of downtime, loss of use, damage to or loss of use of other property (real or personal); failure to realize expected savings; frustration of economic or business expectations; claims by third parties (other than for bodily injury), or economic losses of any kind; or for any special ,incidental, indirect, consequential, punitive or exemplary damages arising in any way out of the performance of, or failure to perform, its obligations under any contract for sale of product, even if E-BOND could foresee or has been advised of the possibility of such damages. The Parties expressly agree that these limitations on damages are allocations of risk constituting, in part, the consideration for this contract, and also that such limitations shall survive the determination of any court of competent jurisdiction that any remedy provided in these terms or available at law fails of its essential purpose.