



EpoxySystems' Product # 845

Epoxy Penetrate Prime Coat

DESCRIPTION:

ESI #845 Epoxy Penetrate & Prime Coat is a 100 % solids, low viscosity, epoxy primer for use on steel, concrete or wood. The low viscosity and special adhesion promoters make it an excellent penetrate of rusted steel or concrete. **ESI #845** acts as an inert barrier, resistant to impact, acids, caustics, solvent and thermal shock. The tough water proof surface is excellent for subsequent coatings.

ADVANTAGES:

- Penetrates and reinforces rusted steel surfaces.
- Cures under high humidity.
- Solvent free; 0.0 lbs. VOC.
- Good abrasion, heat and impact resistance.
- No blush or exudation.

PHYSICAL PROPERTIES:

Finish	Semi-Gloss
Color	Clear
Pot Life	3 hours @ 75° F (24° C)
Mixing Ratio	2 parts "A" to 1 part "B" By volume
Tack Free	8 hours @ 72° F (22.2° C)
Full Cure	7 days @ 72° F (22.2° C)
Recommended Film Thickness	1 coat @ 1.0-1.5 mils
Coverage Rate	1600 sq. ft./gal. @ 1.0 mils (148 meter ² /gal.)
Flash Point	200° F (93° C)
Shear Bond Strength (ASTM D1002)	
Tensile (Steel to Steel):	2,200 psi
Hardness (Shore D) (ASTM D1706-61)	65
Pull Off ASTM	
Steel:	500 psi (MPa - 3.45)
Concrete:	790 psi (MPa - 5.45)
Operating Temperature	
Wet:	250° F (120° C)
Dry:	300° F (149° C)

SURFACE PREPARATION:

ESI #845 Epoxy Penetrant & Prime Coat is designed for less than ideal surface preparations. However, performance will be improved as surface preparation improves. All oil/grease, contaminants, loose rust, loose scale and unsecured old paint must be removed. Remove all contaminants by means of low/high pressure water blasting. Concrete surfaces new or free from contaminants should be brush blasted to remove surface laitance.

MIXING:

Combine (2) two parts "A" to (1) one part "B" by volume in the quantity desired and mix with a low speed drill for 3-5 minutes. Scrape sides and bottom to ensure thorough mixing. Do not thin the **ESI #845**.

ESI #845 is a two component product supplied in 3 gallon and 15 gallon kits. The pot life of the mixed material is 3 hours at 77° F (25° C) . Higher temperatures will reduce working life of the coating; lower temperatures will increase it.

APPLICATION:

ESI #845 Epoxy Penetrant & Prime Coat can be applied by conventional air spray, brush or roller. **ESI #845** is designed to be applied in one coat at 1.0 to 1.5 mils .

A Graco #700 or #800 air spray gun with suitable needle/nozzle and air cap combinations will work best. To minimize over spray, use low air pressure and pot pressure, 5 to 10 psi (0.3 to 0.7 bars) Airless pump application is not recommended.

ESI #845 is low in viscosity. It should be applied in one thin, wet coat sufficient to completely cover and penetrate to the steel surface. Do not apply heavy coats. Clean up application equipment with **appropriate solvent MEK xylene Acetone**.

Apply one coat of **ESI #845** at 1.0 to 1.5 mils - allow overnight cure. An additional coat may be required for very porous surfaces. After overnight cure, **ESI #845** may be coated if still tacky. **ESI #845** may be top coated with a wide range of top coating systems.

SHELF LIFE: 2 years

CAUTION:

“A” Component contains epoxy resin. DANGER! “B” Component contains alkaline amines; strong sensitizer. May cause skin sensitization or other allergic responses. Use with good ventilation, particularly if material is heated or sprayed. Prevent all contact with skin or eyes. Wear protective clothing, goggles, gloves and/or barrier creams. Keep container closed when not in use. Wash thoroughly after handling.

FIRST AID: In case of skin contact, immediately wash with soap and water. in case of eye contact, flush eyes with copious amounts of water for at least fifteen (15) minutes. Remove contaminated clothing shoes. If irritation persists, seek medical attention. Wash clothing before reuse.

FOR INDUSTRIAL USE ONLY**KEEP AWAY FROM CHILDREN****03/2006**

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