

# 1260

## E-BOND 1260 FLEXIBLE EPOXY TRAFFIC DETECTOR LOOP SEALANT

FORMULATED AND LABELED FOR PROFESSIONAL USE ONLY  
NOT FOR SALE TO OR USE BY THE GENERAL PUBLIC



E-BOND 1260 TRAFFIC LOOP SEALANT

PRODUCT DATA

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### DESCRIPTION

E-Bond 1260 is a 100% Solids, 2 component, solvent free, Flexible Epoxy Detector Loop Sealant. E-Bond 1260 is a low viscosity, pourable resin that may be used as is or with selected grade of salt free, kiln dried silica sand. The E-Bond 1260 is formulated to comply with numerous state road specifications for epoxy loop sealants, and in particular Federal Aviation Authority, Item P-606 for a two (2) component epoxy for sealing wire and lights in pavement

### ADVANTAGES

- Easy mixing ratio of 1:1 by volume for easy handling
- Low viscosity
- Moisture tolerant - can be used on damp substrate (not wet substrates) Note #1
- Strong enough to withstand normal vehicle traffic with sufficient flexibility to withstand concrete pavement
- Protects loop wire from moisture penetration
- Excellent adhesion to properly prepared, both concrete and asphalt pavement surfaces
- Provides high electrical properties
- Zero VOC - Fully Reactive, no low boiling constituents

### WHERE TO USE

- Use to embed and protect detector loop wires for traffic signals and airport runways

### LIMITATIONS

- Do not thin E-Bond 1260. Solvents may prevent proper cure.
- The substrate temperatures should be 40°F, minimum, and rising.
- Do not use in expansion (moving) joints.
- Ultimate performance of E-Bond 1260 depends on many factors, i.e., proper design, proper surface preparation and proper curing.

### PHYSICAL PROPERTIES

(Material and curing conditions 75°F and 50% R.H.)

AD-MIX COLOR:	Straw
MIXING RATIO:	1:1 by volume
VISCOSITY:	Pourable, approx. 1500-1800 cps
POT LIFE - ASTM C-881	Neat - 13 min. With Silica Sand 20-min.
TACK FREE TIME ASTM C679	Neat -25-30 min. With Silica Sand 50-60 min.
HARDNESS (SHORE D) ASTM D-2240	35-65
TENSILE ELONGATION ASTM D-638	50% minimum
BOND STRENGTH ASTM C-882	
TO CONCRETE	600 PSI minimum
TO ASPHALT	Good
COEF OF LIN. EXP. 35°-140°F. ASTM-D1168	0.00035
COEF. OF CU. EXP. 35°-140°F. ASTM-D 1168	0.0010
WATER ABSORPTION(24 HRS) ASTM-D-570	.03% max.
3% NACI ABSORPTION(24 hrs) ASTM D-570	max. .03
ASTM #3 OIL ABSORPTION ASTM D-570 (24)	max. .01
GASOLINE ABSORPTION (24hrs) ASTM D-570	max. .05
DIELECTRIC STRENGTH ASTM D-149	400 volts/mil. minimum
ARC Resistance ASTM-D-495	150 sec. minimum
Shelf Life	One year in original unopened containers
Storage Conditions	Store dry at 40-95°F. Condition to 65-85°F before using

**SURFACE PREPARATION**

1. Saw cut joint to desired dimensions.
2. Clear saw cut of water and debris using oil free compressed air.
3. Substrate must be clean and sound.
4. Remove dust, latience, grease, curing compound or any contaminate that would adversely affect the bond of the epoxy, etc. by mechanical means i.e., sandblasting, high pressure water blasting, etc.
5. Surfaces may be dry or damp\* (note #1) but free of standing water.
6. Dirt and dust after surface preparation can affect the bond. Rubbing your hand over the surface will indicate if dust is present.

**MIXING**

A Two-Gallon Unit of E-Bond 1260 Flexible Epoxy Loop Sealant will provide approximately 460 in<sup>3</sup> of epoxy when mixed neat (without sand) 230 in<sup>3</sup> per gallon.

E-Bond 1260 Flexible Epoxy Loop Sealant performs best when pre-conditioned 24 hours in advance to a minimum of 77°F. When used neat, the product temperatures should not exceed 85°F prior to mixing since this will rapidly shorten the working time in the container.

Accurately measure out 1 volume of component A and 1 volume of component B. Mix with special slotted paddle, Plunge or Jiffy mixer attached to a slow rpm 1/2" electric drill. Slow circular motions as well as up and down motions must be used. The paddle should contact the inside surface of the can, the bottom and sides, to ensure complete mixing. Mixing time for a gallon should be 3 minutes with the proper tools. Thorough mixing is necessary in order to obtain maximum physical properties of the cured compound.

If the product is to be used neat, it must be immediately poured in the slot since there is limited working time in the pouring container.

**USING SILICA SAND** - Once the 1260 has been properly mixed and blended to one volume of mixed epoxy; add up to a maximum of 1 volume (i.e., 1 gallon of mixed material, the maximum of 1 gal. of silica sand) of approximately 20/30 mesh salt free, kiln dried silica sand. Thoroughly blend until a homogeneous mixture is obtained, This should provide approximately 1.6 gallons (360 in<sup>3</sup>) of grout.

**APPLICATIONS**

1. Wires, at the discretion of the contractor, may be anchored in place to ensure that they are not at the bottom of the joint with a section of insulation or any small suitable object.
2. Pour the mixture into the prepared slot, starting at the high side of the road. Continue around the sawed slot, filling

approximately 2/3 full depth, allowing the flexible epoxy sealant to settle around the wires. After the initial 2/3 filling of the slot, a second application should immediately be made in order to fully fill the slot.

**HARDENING TIME**

Approximate Slot Hardening Times at Various Temperatures (1260 resin temperature 80°F)

Substrate Temperature	40°F	77°F	90°F
Approximate Slot Hardening Time:			
Neat	120 min.	30 min.	25 min.
With Silica	150 min.	50 min.	35 min.

**E-BOND 1260 FLEXIBLE TRAFFIC EPOXY DETECTOR LOOP SEALANT JOINT SIZES**

Joint Sizes are getting larger in width and depth to accommodate more wires and in some cases to accommodate flexible tubing, where the wires are placed through the front of the flexible tubing.

These larger sizes sometimes 1-1/2" wide x 4" deep can create problems with some sealants if there is not a good understanding of the heat generated by the reaction of the epoxy.

E-Bond has run a number of tests in the lab to duplicate various depths and widths of E-Bond 1260 sealant.

It is impossible in the laboratory to duplicate all field conditions and thus, it is urged when a contractor must precede on a job with an extra-large width and depth, that he contact E-Bond Epoxies technical department for advice.

For installation with large depths and widths it may be necessary for a field test before proceeding with the full scale job.

**E-BOND 1260 FLEXIBLE EPOXY LOOP SEALANT \***

<u>SIZE</u>	<u>OBSERVATIONS</u>
1/2" W X 4"D X 12" L	GOOD BOND, NO CRACKING
5/8" W X 4"D X 12"L	GOOD BOND, NO CRACKING
3/4" W X 4"D X 12" L	GOOD BOND, NO CRACKING
1" W X 4" D X 12" L	GOOD BOND, 3 TRANSVERSE CRACKS APPROX. 1/4" DEEP
**1-1/2" W X 4"D X 12" L	GOOD BOND, NO CRACKING

\*The above tests of depths and widths were preformed without the addition of silica sand.

It is our conclusion that any groove sizes larger than 3/4" W X 4" D will require the addition of silica sand or layering.

**If Silica Sand Is Not Used, The Maximum Joint Size Is 3/4" W X 4" D.**

**E-Bond 1260 is designed to be used neat or with the addition of silica sand. Add 1 volume of salt free, kiln dried silica sand to one volume of mixed epoxy. The use of silica sand with 1260 is recommended for the joint size of 1-1/2" w x 4" d where the 3/4" I.D. flexible tubing is placed in the center.**

\*\* With 3/4" I.D., 1" O.D. flexible tubing placed in the center of joint  
 W = Width      D = Depth      L = Length

**1. DRY VS. DAMP BUT NOT WET SURFACES**

E-Bond 1260 epoxy loop sealant is designed to bond to damp but not wet surface. In testing, on a dry damp surface, there were no problems with loss of bond to the substrate and/or foaming.

On a damp surface with widths greater than 1/2" and depths that exceed 3", some tests indicate foaming did occur on the surface of the sealant, due to the heat generated during the cure.

It is imperative that the surface be as dry as possible with joints greater than 5/8" wide and 3" in depth.

**WHEN IN DOUBT, ENSURE THAT ALL SUBSTRATE SURFACES ARE THOROUGHLY DRY.**

**2. LARGER JOINT SIZES IN WIDTH AND DEPTH**

In joints larger than 5/8" wide and 4" deep, the heat created by the reaction can cause checking and cracking on the top of the joint. In all tests, as per the schedule above, we did not find any problems with bond failure.

The exothermal heat generated was not sufficient to affect loop wire IMSA 51-5 600V when placed in a rubber sleeve.

In the joint width of 1-1/2" Wide x 4" Deep, 3/4 I.D. (1" O.D) Flexible tubing was placed in the center of the joint. No adverse results were noted on this excessively wide and deep joint. The flexible tubing replaced some of the volume of the joint size, thus producing a joint that was without cracks and good bond to the substrate.

**USE OF 1260 LOOP SEALANT FOR INSTALLATION OF PIEZOELECTRIC SENSORS**

E-Bond 1260 Loop sealant may be used to install Piezoelectric Sensors into asphalt pavement surfaces. The 1260 must be mixed with one part clean, kiln-dried, 20/30 silica sand.

The addition of sand will add a few minutes to the working time and allow for the dispersion of heat that builds from the exothermic reaction.

Pour the mixed 1260 grout into the slot and place the piezo frame into the epoxy. Pour the remaining epoxy around the frame. Care should be taken when setting the wires.

**CAUTION: INSTALLATIONS IN ASPHALT**

E-Bond 1260 Flexible Epoxy Detector Loop Sealant is used in many geographical areas across the United States. Comments from the field indicates that not all asphalt is alike. There have been some cases, in extremely hot weather, when a joint is cut in asphalt usually deeper than 1" deep, that after surface preparation, asphaltic oil commences to extrude from the side walls. In cases where hydraulic fluid is extruding from the sidewall, this will prevent proper bond to the asphalt wall. This oil must be removed and the surface properly prepared before installation of the epoxy loop sealant.

CAUTION – E-Bond’s epoxies contain alkaline amines. Strong sensitizer; MAY CAUSE SKIN SENSITIZATION or allergic response ranging from a mild wheezing to a severe asthmatic type attack. Avoid contact with skin or eyes.

IN CASE OF CONTACT 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 shelf life. 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.



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