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Pothole Repairing Compound : Bondade TCU-31

Purdue ECT Team

Purdue University, ectinfo@ecn.purdue.edu

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Pothole Repairing Compound: Bondade TCU-31

The Need

Conventional asphalt-based tacking materials such as hot asphalt-cement, cutbacks or emulsions cannot be applied without specialized spraying and heating equipment. Coatings that are poorly bonded to the existing surface can reduce the longevity of a repair. With current methods of repair, nearly half of the potholes filled today will fail within six months. Bondade uses readily available spraying equipment to wet the surface and develop a tenacious bond between the asphalt and the existing substrate. It is an environmentally safe and non-hazardous material that may be used with hot or cold asphalt concrete, under damp or dry conditions and on nearly all surfaces.

![Figure 1 Bondade patching agent being applied to a pothole](image)

The Technology

Bondade bond promoter is applied to the surface of the repair area prior to placing the asphalt mix. It may be applied to either dry or damp substrates after removing any loose debris from the repair area and standing water must be removed prior to treatment. After application of Bondade, the asphalt (cold or hot mix) can be applied immediately. Bondade will work with the applied asphalt to displace water from the bond line and produce a repair with enhanced long-term durability. This highly effective patch bonding system extends the life of asphalt repairs without increased demands on labor, specialized equipment or additional safety precautions.
THE BENEFITS

- Environmentally Safe and Stable Bond Promoter (Tack Coat)
- Easy and convenient to use - spray or brush on
- Cost Effective... Lasting up to 85% longer
- Non-flammable
- Non-combustible
- Non-toxic
- Not a source of hazardous fumes or vapors
- Non-irritating to the skin

STATUS

Developed by Transpo Industries, Inc., as a solution of highly effective coupling agents designed to promote adhesion of asphalts to a variety of substrates, the use of Bondade markedly extends the working life of asphalt repairs by securing a firm water intensive bond between repair asphalt and the base materials. Bondade can be used for

- Hot or cold patching
- Pavement overlays
- Damp or dry holes
- Emergency repairs

BARRIERS

Bondade should be used whenever new asphalt or bituminous concrete is being applied to either concrete, asphaltic surfaces or potholes. If the repair area is wet standing water must be removed prior to treatment or it will dilute the applied Bondade and reduce its effectiveness.
**Points of Contact**
Transpo Industries, Inc.
Tel: (914) 636-1000, Fax: (914) 636-1282, E-mail: info@transpo.com

**References**
1. Civil Engineering Research Foundation, Highway Innovative Technology Evaluation Center (HITEC)  
2. Castek, Inc., A Transpo Industries Company, CU-31 Asphalitic Bond Promoter (Tack Coat)
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**Reviewers**
Peer reviewed as an emerging construction technology

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