**NONEL® LEAD LINE**  
Nonelectric Shock Tube

### Properties

| Net Explosive Content per 100 units | 0.0044 kg  
<table>
<thead>
<tr>
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<tbody>
<tr>
<td></td>
<td>0.0097 lbs</td>
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<table>
<thead>
<tr>
<th>Length</th>
<th>Spools / Case</th>
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<tbody>
<tr>
<td>meters</td>
<td>feet</td>
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<tr>
<td>762</td>
<td>2500</td>
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<td>2</td>
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- Length rounded to nearest one-half meter.
- See case label for exact case weight.

**Case Dimensions**  
51 x 25 x 28 cm  
20 x 9 7/8 x 10 7/8 in

**Hazardous Shipping Description**  
- Articles, Explosives, N.O.S. (HMX, Aluminum),  
  1.4S, UN 0349, PG II

**PRODUCT DESCRIPTION**

NONEL LEAD LINE is NONEL shock tube spooled at the factory in 763 meter (2,500 foot) lengths for easy application and deployment. NONEL LEAD LINE shock tube is a small diameter, three-layer plastic tube coated on the innermost wall with a reactive explosive compound. When initiated, NONEL shock tube propagates a low energy signal, similar to a dust explosion, at approximately 2000 m/sec (6,500 ft/sec) along the tube’s length with minimal disturbance to the outside of the tube. The signal is transmitted from one NONEL shock tube to another through field-assembled splices.

NONEL LEAD LINE provides maximum flexibility to the blaster in choosing a position of safety from which to initiate nonelectric blast rounds in either underground or surface applications. NONEL LEAD LINE is the only NONEL product that can be cut and spliced into a NONEL detonator product to construct a custom length nonelectric starter assembly.

**APPLICATION RECOMMENDATIONS**

- **ALWAYS** splice NONEL LEAD LINE to NONEL EZTL™ nonelectric trunkline delay detonators, NONEL EZ DET® nonelectric blast initiation system, NONEL TD or NONEL Starter detonators to make-up the nonelectric starter assembly when using NONEL LEAD LINE as the primary initiator for NONEL blast rounds.

- **ALWAYS** trim at least 3 m [10 ft] of tubing before inserting into a nonelectric shock tube starting device or whenever dirt and/or moisture may have compromised the open tube ends before making a splice connection.

**Product Disclaimer:** Please see reverse side.
NONEL® LEAD LINE
Nonelectric Shock Tube

TRANSPORTATION, STORAGE AND HANDLING

• NONEL LEAD LINE must be transported, stored, handled and used in conformity with all federal, state, provincial and local laws and regulations.
• For maximum shelf life (3 years), NONEL LEAD LINE must be stored in a cool, dry, well ventilated magazine. Explosive inventory should be rotated. Avoid using new materials before the old. For recommended good practices in transporting, storing, handling and using this product, see the booklet “Prevention of Accidents in the Use of Explosive Materials” packed inside each case and the Safety Library Publications of the Institute of Makers of Explosives.

APPLICATION RECOMMENDATIONS - continued

• ALWAYS replace the plastic tube closure over the open end of any NONEL LEAD LINE that remains on the spool and is intended to be used to make up another nonelectric starter assembly.
• ALWAYS make the final hook-up of the nonelectric starter assembly to the blast round only after all equipment and non-essential personnel are clear of the blast area.
• ALWAYS unspool NONEL LEAD LINE by hand if the starter assembly has been spliced to it and is attached to the blast round.
• ALWAYS keep any NONEL LEAD LINE tube ends sealed and free from dirt and moisture since dirt or moisture in the shock tube may cause a misfire.
• NEVER use NONEL LEAD LINE for in-hole use. NONEL LEAD LINE is for use outside the borehole only.
• NEVER attempt to knot different lengths of shock tube together. Shock tube will not initiate itself through knot connections. It must be spliced.
• NEVER remove the plastic tube closure from the NONEL LEAD LINE shock tube until just before splicing.
• NEVER attach the starter assembly to the blast round until after the LEAD LINE deployment is complete whenever NONEL LEAD LINE is to be unspooled by any method other than by hand,
• NEVER run over NONEL LEAD LINE with equipment. This may damage the shock tube and may cause a misfire.
• ALWAYS replace the NONEL LEAD LINE if it is damaged
• When making a nonelectric starter assembly using NONEL LEAD LINE, ALWAYS remove the plastic tube closure and save for later use. Splice two freshly-cut ends of NONEL shock tube together (one from the NONEL LEAD LINE and the other from the NONEL detonator) by inserting them into opposite ends of the plastic connector sleeve and pushing them toward one another until they are both at least ½ cm (¼ in) in the splice.

ADDITIONAL INFORMATION – Visit dynonobel.com for Brochures and Case Studies related to this product.

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