**Product Description**

**FIRELINE 17/80 HMX LS** is designed to be used in carrier-based perforating systems within HMX time and temperature operating ranges, where the jacket is **protected or not exposed** to pressure and/or fluids. Tubing or wireline conveyed perforating systems shall be employed within time and temperature limits (see graph). Nylon jacket limitations will not normally permit this product to be used in exposed applications within HMX application ranges.

**Temperature Range**
The temperatures listed are maximum values. **DO NOT EXCEED.**

<table>
<thead>
<tr>
<th>Time (Hr)</th>
<th>Temperature (°C)</th>
<th>Temperature (°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>204 (400)</td>
<td>400</td>
</tr>
<tr>
<td>1</td>
<td>177 (350)</td>
<td>350</td>
</tr>
<tr>
<td>4</td>
<td>38 (100)</td>
<td>100</td>
</tr>
<tr>
<td>24</td>
<td>121 (250)</td>
<td>250</td>
</tr>
<tr>
<td>48</td>
<td>66 (150)</td>
<td>150</td>
</tr>
<tr>
<td>100</td>
<td>38 (100)</td>
<td>100</td>
</tr>
<tr>
<td>200</td>
<td>0 (50)</td>
<td>50</td>
</tr>
<tr>
<td>300</td>
<td>0 (50)</td>
<td>50</td>
</tr>
<tr>
<td>400</td>
<td>0 (50)</td>
<td>50</td>
</tr>
</tbody>
</table>

**Properties**

- **Explosive Core Load**: 17 g/m (80 gr/ft) nominal
  - 15.3 g/m (72 gr/ft) minimum
- **Detonation Velocity**: 7500 m/s (24,600 ft/s) nominal
  - 7000 m/s (22,960 ft/s) minimum
- **Shrinkage**: 1% maximum @ 163°C (325°F) in 24 hrs
- **Jacket Thickness**: 0.20 mm (0.008 in) minimum
  - ± 0.20 mm (0.008 in) nominal
- **Lap Joint Sensitive**: Yes
- **Product Code**: A571010
- **Cord Components**
  - HMX explosive core (white)
  - Shrink resistant braid (yellow/gold)
  - Nylon jacket (green)

- **Temperature resistance** is based upon the manufacturer’s laboratory tests in air, at ambient pressure only.
- **Shrinkage** is defined as the overall decrease in length.
- **Velocity** was tested unconfined, at ambient pressure, and after “cool down.”

**Hazardous Shipping Description**

Cord, Detonating, 1.1D, UN 0065 II EX 1992020035

**Alternative Packaging:** FIREPAK® 1.4S air cargo shipping containers

- Product Code: A571017
- Articles, Explosive N.O.S., UN 0349 II EX 1999010231
FireLine®
17/80 HMX LS

Transportation, Storage and Handling
- For maximum shelf-life, detonating cord must be stored in cool, dry, well-ventilated magazines. Explosives inventory should be rotated. Use older inventory first. Recommended shelf life, under proper storage conditions, is five (5) years from date of manufacture.
- FIRELINE 17/80 HMX LS detonating cords must be transported, stored, handled and used in conformity with all federal, state, provincial and local laws and regulations.

Application Recommendations
This product is not recommended for exposure to well bore fluids.
- ALWAYS cut FIRELINE 17/80 HMX LS detonating cord with a sharp knife.
- NEVER attempt to cut FIRELINE 17/80 HMX LS detonating cord with a blow from a sharp or blunt object, such as an axe, pipe wrench, or rock.
- NEVER saw FIRELINE 17/80 HMX LS detonating cord; it may explode and kill or injure.
- NEVER cut detonating cord with devices that produce metal-to-metal contact, such as scissors, wire cutters, crimpers or similar instruments.

Packaging

<table>
<thead>
<tr>
<th>Package</th>
<th>Gross Weight*</th>
<th>Net Weight*</th>
<th>Explosive Weight*</th>
<th>Spools/Case</th>
<th>Length/Spool**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiberboard box</td>
<td>5.1 kg</td>
<td>11.2 lbs</td>
<td>4.9 kg</td>
<td>10.7 lbs</td>
<td>2.6 kg</td>
</tr>
</tbody>
</table>

- Weights represent nominal values.
- All weights are approximate.
- **±2%; 152m spools may contain as many as 3 pieces, totally 152 m, with a minimum splice/piece length of 8 m (25 ft).

X-ray services are also available for high profile applications requiring an extra level of assurance. Product Code A571011.

FIREPAK® 1.4D packaging available. Product code A571015.

Case Dimensions
26 x 26 x 14 cm 10 ¼ x 10 ¼ x 5 ½ in

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Dyno Nobel
2795 East Cottonwood Parkway Suite 500, Salt Lake City, Utah 84121 USA
Phone 800-732-7534 Fax 801-328-6452 Web www.dynonobel.com