**HELIX™ High Energy Liquid Explosive**

HELIX™ High Energy Liquid Explosive is a powerful and versatile liquid explosive which eliminates the logistical difficulties usually encountered in shipping and storing high explosives. HELIX™ is sold as two components, the liquid and the activator, each of which can remain in long term storage. When mixed, HELIX™ is a detonator sensitive, high explosive with high gas volume, high bulk energy and consistent detonating velocity.

**APPLICATION:**
- Breaching
- Explosive ordnance disposal
- General demolition
- IED defeat

**KEY FEATURES:**
- Non-explosive until mixed
- Mixes and arms instantly
- Easy to use
- Adaptable
- Non-explosive shipping and storage classification
- Reduced logistics cycle
- Ready to ship

**PROPERTIES:**
- Velocity: 6,400 m/s (21,000 f/s)
- Density: 1.3g/cc
- High bulk energy
- Thermally stable to 167°F (75°C)
- Low sensitivity to friction, impact and electrostatic discharge (ESD)

**OPERATION:**
HELIX™ High Energy Liquid Explosive is supplied as a two component system. The flammable liquid and flammable solid are combined and mixed to form the high explosive formulation ready for use. HELIX™ is sensitive to No. 8 strength detonators at ambient conditions as well as 50 g/ft (10 g/m) detonating cord. HELIX™ can also be supplied in breaching frames where only the flammable liquid needs to be added.

HELIX™ is suitable for use and can be utilized in multiple end items such as shaped charges, bulk charges, disrupters and common demolition configurations.

**HELIX™ - HIGH ENERGY LIQUID EXPLOSIVE**

<table>
<thead>
<tr>
<th>BINARY HELIX™ LIQUID &amp; ACTIVATOR PLASTIC CONTAINERS</th>
<th>CONTAINER SIZE (NOMINAL)</th>
<th>NET EXPLOSIVE WEIGHT (NOMINAL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td>8” x 1.38” (20.25 cm x 3.5 cm)</td>
<td>0.4 0.20</td>
</tr>
<tr>
<td>Medium</td>
<td>0.4 Gallon (1.5 Liters)</td>
<td>3 1.36</td>
</tr>
<tr>
<td>Large</td>
<td>1 Gallon (3.75 Liters)</td>
<td>10 4.5</td>
</tr>
</tbody>
</table>

EBAD is able to tailor binary portions to meet most operational requirements.

**Attention:**
The information and recommendations described in this brochure cannot possibly cover every application of the products or variation of conditions under which the products are used. The recommendations described in this brochure are based on the manufacturer’s experience, research and testing. They are believed to be correct and are intended as a guide to aid users. The recommendations contained herein are all meant to represent our current production. The products described may be subject to change. Please feel free to contact Ensign-Bickford Aerospace & Defense Company for verification.

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