Osx™ 5

**Description**
Osx™ 5 is a packaged detonator sensitive emulsion explosive available in degradable and non-degradable variants. In degradable products, degradation technology transforms the emulsion explosive to non-explosive chemicals.

The product is packaged in rigid plastic shells to withstand the toughest loading situations. A unique proprietary detonator insertion method minimizes detonator wire exposure reducing misfire risk. Additionally, this product incorporates Orica’s DetLok™ system in the dual det-well configuration. Osx™ 5 is available with specially designed marsh anchor accessories.

Products in the Osx 5 range include:
- Osx™ 5 Standard
- Osx™ 5 D3 Degradable
- Osx™ 5 D12 Degradable

**Application**
Osx™ 5 is a premium formulation made specifically for seismic exploration.

**Key Benefits**
Osx™ 5 emulsion explosive provides:
- Unparalleled control and accuracy over degradation for superior security and environmental safety of abandoned charges, without compromising signal performance (Osx™ 5 D3 and Osx™ 5 D12 only).
- Greater safety. Osx™ 5 is inherently safer than Pentolite and Dynamite based products due to its reduced impact sensitivity.
- Consistent and reliable shooting generating good signal strengths in varying conditions encountered in geophysical exploration.
- Extremely water resistant and will shoot reliably after 90 days at a depth of 40 m (132 ft).
- Free of nitroglycerin – no headaches, low fumes.
- Inherent degradation system enables the charge to be rendered NON-EXPLOSIVE in approximately 6 months (Osx™ 5 D3) and 15 months (Osx™ D12) from the day of loading in water bearing shot holes.

**Technical Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOD</td>
<td>5000 m/s</td>
</tr>
<tr>
<td>Gas generation*</td>
<td>900 l/kg</td>
</tr>
<tr>
<td>Energy</td>
<td>3.55 MJ/kg</td>
</tr>
<tr>
<td>Detonating Pressure</td>
<td>109 Kbar</td>
</tr>
<tr>
<td>Density</td>
<td>1.16 g/cc nominal</td>
</tr>
<tr>
<td>Hazardous Shipping Description</td>
<td>Explosive, Blasting, Type E 1.1D</td>
</tr>
<tr>
<td></td>
<td>UN 0241 Packaging Group II</td>
</tr>
</tbody>
</table>

*Gas generation, detonating pressure and energy values are calculated using the IDeX™ computer code owned by Orica for the exclusive use of its companies. Other computer codes may give different values.

**Packaging**
Osx™ 5 is packaged in rigid plastic shells.

**Standard sizes**

<table>
<thead>
<tr>
<th>Product Type</th>
<th>Cartridge Size (mm)</th>
<th>Quantity per case</th>
<th>Case Size (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Osx™ 5 250g</td>
<td>57 mm x 246</td>
<td>56</td>
<td>522 l x 444 w x 261 h</td>
</tr>
<tr>
<td>Osx™ 5 500g</td>
<td>61 mm x 290</td>
<td>32</td>
<td>540 l x 270 w x 305 h</td>
</tr>
<tr>
<td>Osx™ 5 1000g</td>
<td>61 mm x 455</td>
<td>20</td>
<td>520 l x 345 w x 250 h</td>
</tr>
<tr>
<td>Osx™ 5 2000g</td>
<td>61 mm x 786</td>
<td>10</td>
<td>845 l x 320 w x 140 h</td>
</tr>
</tbody>
</table>

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Recommendations for Use

Priming
Osx™ 5 is a detonator sensitive explosive and can be reliably initiated with Osd™ Electric Seismic Detonators or Oseis™ Electronic Detonators. DetLok™ detonator retention device incorporated in both det-wells.

Loading
Osx™ 5 is packaged in rigid cartridges. These molded plastic shells are made of high-density polyethylene, which resists water, oil and abrasion.

Shelf Life
One year from time of manufacture.

Storage and Handling

Product Classification

Authorised Name: Osx™ 5
Correct Shipping Name: Explosive, Blasting, Type E
UN No. 0241, PG II
Class Code 1.1D

All regulations pertaining to the handling and use of such explosives apply.

Degradation Technology

Orica has proprietary degradation technology in respect of which patents have been applied for. This technology has been demonstrated to render emulsion explosive insensitive to detonation. This transformation process relies on the chemical interaction with emulsion containing material, which can only be sustained in the appropriate water based environmental conditions. The presence of these conditions cannot be predicted nor controlled by Orica therefore Orica makes no claim as to the effectiveness or extent of the degradation process.

Trademarks

The word Orica and the Ring device are trademarks of Orica Group Companies.

Disclaimer

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Warning

Carbon monoxide and carbon dioxide may migrate through the ground after detonation of explosives. Consult an Orica representative for specific applications.

Safety

Osx™ 5 can be initiated by extremes of shock, friction or mechanical impact. As with all explosives Osx™ 5 should be handled and stored with care.