Z-BAR®
Contour Charge Product

Description
Z-BAR is a contour product, designed to deliver the perfect solution for precision floor and perimeter blasting in wet or dry underground developments. It is a high strength packaged explosive produced in a continuous tube form to be used as a decoupled perimeter product. It is detonator sensitive and has 10 g/m detonating cord running internally through the entire length of the product.

Application
Z-BAR has been specifically designed to provide an easy-to-use and effective system for floor blasting in underground development rounds.

Z-BAR is also uniquely suited to development blasting where the ground is wet and suited to a high heave product.

Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typical Density (g/cm³)</td>
<td>0.9 – 0.95</td>
</tr>
<tr>
<td>Charge Weight (kg/m)</td>
<td>0.5</td>
</tr>
<tr>
<td>Velocity of Detonation ANFO (m/s)</td>
<td>Dependent on detonating cord VoD</td>
</tr>
<tr>
<td>Detonating Cord (m/s)</td>
<td>6500</td>
</tr>
<tr>
<td>Water Resistance</td>
<td>Excellent</td>
</tr>
<tr>
<td>Diameter (mm)</td>
<td>29</td>
</tr>
<tr>
<td>Colour</td>
<td>White</td>
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</tbody>
</table>

Packaging

<table>
<thead>
<tr>
<th>Length (m)</th>
<th>Quantity per Box</th>
<th>Length per Box (m)</th>
<th>Nominal Box Weight (maximum) (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>12</td>
<td>36.0</td>
<td>25</td>
</tr>
<tr>
<td>3.5</td>
<td>10</td>
<td>35.0</td>
<td>25</td>
</tr>
</tbody>
</table>

Hazardous Shipping Description
Explosive, Blasting, Type B 1.1D UN 0082
Z-BAR®
Contour Charge Product

Features and Benefits

- Charge concentrations are reduced due to the lateral decoupling of the cartridge, resulting in smooth and consistent perimeter results.
- Clean floor splitting is achieved by the high velocity of detonation of the internally traced 10g cord.
- A continuous ridged tube with Z-shape concertinas are pre-cut to standard drill lengths, reducing deployment and charge time.
- The continuous plastic tubes are water resistant allowing charging into dry, through to fully wet holes.

Recommendations

**Priming requirements** - Z-BAR is sensitive to a No. 8 strength detonator or greater. The preferred method of initiation is via the NONEL® system.

Whilst holding the primer section of the Z-BAR tube charge, insert the NONEL detonator fully into the detonator well, located at the end of the primer section. The NONEL tube should be secured into the notch, located in the rim of the detonator locator.

While holding the first length of tube with the detonator locator, rip the tape from around the Z-BAR tube and let the remaining tube lengths drop.

Insert the primer section of the Z-BAR tube into the collar of the blasthole and push it in until the tube end is flush with the collar.

**Recommendations (continued)**

Using the ANFO hose, push the Z-BAR charge fully to the toe of the blasthole. The Z-BAR tube charge must be contained fully within the blasthole, with a gap left to the collar of the blasthole. This will minimise failures due to “suck out”.

**Ground Temperature** - Suitable for use in ground with a temperature range from 0°C to 55°C.

**Shelf life** - Z-BAR products have a recommended shelf life of 12 months when transported and stored under ideal conditions.

**Safe handling, transportation and storage**

**First Aid** – You can find detailed first aid information on the relevant Dyno Nobel Safety Data Sheet. Refer to [www.dynonobel.com](http://www.dynonobel.com) for more information if required.

**Safety** - All explosives are classified as dangerous goods and can cause personal injury and damage to property if used incorrectly.

**Transportation and Storage** - All explosives must be handled, transported and stored in accordance with all relevant regulations. Stock should be rotated such that older product is used first.

**Product Disclaimer** The explosive products discussed in this document should only be handled by persons with the appropriate technical skills, training and licences. While Dyno Nobel has made every effort to ensure the information in this document is correct, every user is responsible for understanding the safe and correct use of the products. If you need specific technical advice or have any questions, you should contact your Dyno Nobel representative. This information is provided without any warranty, express or implied, regarding its correctness or accuracy and, to the maximum extent permitted by law, Dyno Nobel expressly disclaims any and all liability arising from the use of this document or the information contained herein. It is solely the responsibility of the user to make enquiries, obtain advice and determine the safe conditions for use of the products referred to herein and the user assumes liability for any loss, damage, expense or cost resulting from such use. © DYNO, GROUNDBREAKING PERFORMANCE, Z-BAR, NONEL and the Packaged Explosives and Explosion device are registered trademarks of the Dyno Nobel / Incitec Pivot Group. © Dyno Nobel Asia Pacific Pty Limited 2018 Reproduction without permission strictly prohibited.