TECHNICAL DATA SHEET

Pentex™ D Booster
Australia

Description
Pentex™ D boosters are made of a high explosive composition cast into a plastic shell. One longitudinal tunnel in the booster accommodates a detonator and a side clip on the shell secures signal tube.

Pentex™ D boosters have a high density and high velocity of detonation (VOD) to maximise performance.

Safety
Pentex™ D boosters contain molecular explosives, which can be initiated by intense impact, friction or heat. As with all high explosives, Pentex™ D boosters should be handled and stored with care.

Boosters must be handled with care and avoid impact on a solid surface or another booster. Any such collision may cause damage that could lead to a misfire, or premature initiation. Pentex™ D boosters may be used at temperatures up to 70°C. DO NOT use these boosters with any detonator, which cannot be completely contained within the booster. If this is not observed, damage to the detonator may occur during charging which may lead to a premature detonation.

Pentex™ D boosters are supplied in Class 1.1D packaging and have UN Number 0042.

Application
Pentex™ D boosters are reliably initiated by Exel™, i-kon™, unitronic™ and eDev™ detonators.

Technical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal diameter</td>
<td>21 mm</td>
</tr>
<tr>
<td>Nominal length</td>
<td>138 mm</td>
</tr>
<tr>
<td>Nominal mass</td>
<td>25 g</td>
</tr>
<tr>
<td>Shell Colour</td>
<td>Orange</td>
</tr>
<tr>
<td>Nominal density</td>
<td>1.65 g/cm³</td>
</tr>
<tr>
<td>Nominal Velocity of Detonation</td>
<td>7.2 km/s</td>
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<tr>
<td>Nominal detonation pressure</td>
<td>22 GPa</td>
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<tr>
<td>Water resistance</td>
<td>Excellent</td>
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<tr>
<td>Oil resistance</td>
<td>Excellent</td>
</tr>
</tbody>
</table>

Pentex™ D boosters have been specifically designed to provide reliable initiation in conjunction with Hypercharge™ development units, for tunneling and underground development blasts. The main intended application, for Pentex™ D boosters, is for use with explosives in hole diameters between 32mm - 48mm.

Recommendations For Use

Insert the detonator into the booster tunnel from the end, and pull the signal tube into the side clip to lock it into place. Load the Pentex™ D booster into the hole with the base of the detonator pointing towards the borehole collar (reverse priming).

Pentex™ D is designed to fit into an applicator which threads onto a production nozzle fitted to the end of a loading hose from a Hypercharge™ development unit. Push the loading hose into the blast hole as normal. The Pentex™ D booster will automatically be picked up and delivered to the toe of the blast hole. Alternatively, Pentex™ D can be inserted into the applicator prior to inserting the loading hose into the blast hole.

Ensure the hose is pushed down to the toe of the hole and pumping is commenced prior to withdrawing the hose. This is to ensure correct placement of the primer at the toe of the hole.
Packaging
Pentex™ D boosters are packed in cardboard cases. The case dimensions are 0.356 x 0.261 x 0.135 m. A case weighs 6 kg and contains 150 boosters. One applicator is included in each case.

Storage and Handling
Product Classification
Authorised Name: Pentex™ D
Proper Shipping Name: Boosters, without detonator
UN No: 0042
Classification: 1.1D

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

These boosters should be stored in a cool, dry magazine licensed for 1.1D explosives. The oldest cases should be used first. Pentex™ D boosters have a maximum shelf life of 5 years in good storage conditions.

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