Cordtex™ 5W Underground
Detonating Cord
Australia

**Description**
Cordtex™ 5W Underground is a strong, flexible detonating cord with a nominal core charge of 5g/m PETN supplied on 250 m capacity plastic spools suited to the needs of the underground mining industry.

Cordtex™ 5W Underground consists of a continuous core of PETN powder encased by high strength textiles. This is covered by a seamless plastic jacket, and over-wrapped with an outer layer of textiles held in place by a special high temperature wax. It is designed to maintain stability under the most demanding conditions.

**Safety**
Cordtex™ 5W Underground contains explosive which is relatively insensitive to accidental initiation by shock, friction or mechanical impact under normal conditions of use.

Cordtex™ 5W Underground can detonate if subjected to extremely high temperatures, but remains stable and safe to use below 80°C. For temperatures between 70°C and 80°C, exposure time should not exceed 24 hours.

Cordtex™ 5W Underground is supplied in Class 1.1D packaging and has UN Number 0065.

**Technical Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Nominal Coreload</td>
<td>5 g/m</td>
</tr>
<tr>
<td>Colour</td>
<td>Yellow with 2 black stripes, waxed finish</td>
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<tr>
<td>Nominal Tensile Strength</td>
<td>90 kgf</td>
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<tr>
<td>Nominal Velocity of Detonation</td>
<td>6.5 to 7.0 km/s</td>
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<tr>
<td>Nominal Diameter</td>
<td>4.0 mm (Average)</td>
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**Application**
Cordtex™ 5W Underground is suited for use as a surface trunkline, as it will reliably initiate itself through suitable knots and is compatible with Exel™ Millisecond Connectors (MSCs) and Exel™ non-electric detonators using appropriate J-hook connections.

Cordtex™ 5W Underground downlines will reliably initiate Pentex™ PowerPlus™ boosters. It cannot be used with most other types of boosters.

Cordtex™ 5W Underground will reliably initiate all conventional detonating cords, including itself, through approved knots or connections.

Cordtex™ 5W Underground has excellent resistance to penetration from water and oil. It has excellent flexibility and knot holding at normal ambient temperatures.

**Recommendations For Use**
Cordtex™ 5W Underground should only be cut using a single bladed cutter, or a sharp knife on a non-ferrous block.

Cordtex™ 5W Underground can be reliably initiated by an Exel™ Lead-In-Line, Exel™ Trunkline Delay or #8 Strength Electric Detonator. Detonators should be firmly attached to the cord, with the base at least 150 mm from a dry cut end and pointing in the desired direction of propagation. When using
electric detonators, two detonators are recommended for reliability.

Cordtex™ 5W Underground can be reliably initiated by detonating cords with a core load of 3.6 g/m or greater when approved connections are used. For extending surface trunklines, cord should be tied together with a "reef" knot (Figure 1). The knot should be 150 mm from each dry cut end and pulled tight, with the free ends taped back along the cord to ensure positive contact.

For attaching downlines and branchlines to a surface trunkline, connections should be made using an approved knot (Figure 1).

All connections should be tight and made at right angles, to minimise the chance of "approach"-type cut off failures.

Cordtex™ 5W Underground surface trunklines should be laid out with no loops, kinks, tight bends or excessive slack. A closed loop of cord is recommended to provide insurance against poor connections. Detonating cord should never be pulled off the reel over an end flange, as this can cause kinks.

Downlines should be kept taut to prevent the formation of kinks or loops, which could lead to a misfire. Downlines must be continuous lengths of cord and should never incorporate knots, lap joins or delay connectors inside a blasthole.

Packaging
Cordtex™ 5W Underground detonating cord is supplied on plastic spools, which hold 250 metres of cord. A standard cardboard outer case contains 2 of these spools. A case measures 0.32 x 0.30 x 0.30 m and weighs approximately 7.5 kg. The weight of contained explosive material is 2.5 kg per 500 m or case.

Storage and Handling
Cordtex™ 5W Underground should be stored in a cool, dry, well-ventilated magazine licensed for Class 1.1D explosives.

Cordtex™ 5W Underground has a maximum shelf life of 5 years when stored correctly.

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