**TECHNICAL DATA SHEET**

**Amex™**
Australia

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### Technical Properties

<table>
<thead>
<tr>
<th></th>
<th>Loose Poured 0.8 g/cc</th>
<th>Blow Loaded 0.95 g/cc</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Density</strong>&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Relative Effective Energy</strong>&lt;sup&gt;(2)&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Relative Weight Strength</strong></td>
<td>100%</td>
<td>111%</td>
</tr>
<tr>
<td><strong>Relative Bulk Strength</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- To ANFO @ 0.8g/cc</td>
<td>100%</td>
<td>132%</td>
</tr>
<tr>
<td>- To ANFO @ 0.95g/cc</td>
<td>75%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Velocity of Detonation</strong>&lt;sup&gt;(3)&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.5 - 4.8 km/s</td>
<td></td>
</tr>
</tbody>
</table>

### Description

Amex™ is a free flowing mixture of ammonium nitrate prill and fuel oil, formulated to be oxygen balanced, for use in dry blastholes.

The explosive has a granular appearance and is colour coded red for identification.

### Application

Amex™ is suitable for use where the blastholes are dry and will remain dry until firing. Amex™ can be used as a column charge in mining or quarrying and for general blasting work. Amex™ can be loose poured or pneumatically (blow) loaded into blastholes.

Amex™ is not suitable for ground containing reactive sulphides.

### Key Benefits

- Amex™ packaged blasting agent has reduced post-blast fumes that result in reduced turnaround times.
- Amex™ loads easily and completely fills the borehole, delivering maximum energy.
- Amex™ is factory blended to provide consistent results.

### Recommendations for Use

#### Blasthole Diameter

The minimum recommended hole diameter for pneumatically loaded Amex™ is 25mm and for loose poured product is 76mm.

#### Blasthole Depth

Amex™ can be used in blast holes of any practical depth.

#### Priming and Initiation

Amex™ can be reliably initiated by a Senatel™ packaged explosive cartridge, or a Pentex™ booster, in conjunction with an eDev™ detonator, uni tronic™ detonator, i-kon™ system detonator or electric No.8* or Exel™ detonator.

Use of detonating cord with Amex™ is not recommended.

#### Charging

The recommended pressure for pneumatic loading of Amex™ is 350-400kPa.

#### Static Electricity

During pneumatic (blow) loading a build-up of static electricity can occur. Precautions such as the use of a semi-conductive loading hose (Lo-Stat) must be taken. The
pneumatic loader must also be properly earthed. Pneumatic loading over bare detonators is not recommended.

**Sleep-Time Within Blastholes**

In dry blastholes the maximum recommended sleep time for Amex™ is 30 days. However, sleep time is dependent on factors such as hole diameter, density, ground water conditions and initiation system.

An Orica Technical Representative should be consulted if special conditions exist.

**Reactive Ground and Ground Temperature**

**Reactive Ground**

Amex™ is not suitable for use in ground containing reactive sulphides.

**Elevated Temperature**

Amex™ is suitable for use in ground temperatures from 0°C to a maximum of 55°C.

If your application requires operation outside this temperature range, please contact your local Orica Technical Representative.

**Packaging**

Amex™ is available in 500, 20 and 10kg packs depending upon the supply district. Contact your local Orica sales office for further information.

**Product Quality**

Amex™ is manufactured using an ISO9001 accredited quality process.

**Storage and Handling**

**Product Classification**

<table>
<thead>
<tr>
<th>Authorised Name:</th>
<th>Amex™</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper Shipping Name:</td>
<td>Explosive, Blasting, Type B</td>
</tr>
<tr>
<td>UN No:</td>
<td>0082</td>
</tr>
<tr>
<td>Classification:</td>
<td>1.1D</td>
</tr>
</tbody>
</table>

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

**Storage**

Store Amex™ in a magazine suitably licensed for Class 1.1D explosives. Amex™ has a storage life of 4 months in stable, temperate conditions. However exposure to hot or cold extremes may cause the product to deteriorate prematurely.

**Disposal**

Disposal of explosive materials can be hazardous. Methods of safe disposal of explosives may vary depending on the user’s situation. Please contact an Orica Technical Representative for information on safe practices.

**Safety**

The post detonation fume characteristics of Amex™ make the product suitable for both underground and surface blasting applications. Users should ensure that adequate ventilation is provided prior to re-entry into the blast area.

Amex™ can be initiated by extremes of shock, friction or mechanical impact. As with all explosives, Amex™ should be handled and stored with care. Amex™ must be kept clear of flame and excessive heat. Amex™ is readily desensitised by water.

Explosives based on Ammonium Nitrate such as Amex™ may react with sulphides in the ground and create potentially hazardous situations. Orica accepts no responsibility for any loss or liability arising from use of the product in ground containing sulphides or other reactive material.

More detailed product safety information can be found in the product Safety Data Sheet.

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Emergency Telephone Numbers
Within Australia: 1800 033 111
Outside Australia: +61 3 9663 2130

Notes:
(1.) Nominal density only.
(2.) REE is the Effective Energy relative to ANFO at a density of 0.8 g/cm$^3$. ANFO has an effective energy of 2.30 MJ/kg. Energies quoted are based on ideal detonation calculations with a 100MPa cut-off pressure.
(3.) The actual VOD depends on the conditions of use including the diameter of the hole and the degree of confinement. The range quoted refers to unconfined minimum diameter up to calculated ideal VOD.
(4.) Reactive ground and elevated temperature as defined in the Australian Explosives Industry Safety Group (AEISG) Code of Practice for Elevated Temperature and Reactive Ground.