Description
Amex™ LD 50/50 is a free flowing mixture, formulated as a low density, primer sensitive explosive for use in dry blastholes.

The explosive has a granular appearance and is lightly coloured coded blue for identification.

Application
Amex™ LD 50/50 is suitable for use as a column charge in dry blastholes where the high strength of Amex™ is not required.

Amex™ LD 50/50 can be free-poured or pneumatically loaded from pressure vessel type loading equipment.

Amex™ is not suitable for ground containing reactive sulphides.

Key Benefits
- Amex™ LD 50/50 packaged blasting agent can be used to generate smooth walls with minimum overbreak.
- Amex™ LD 50/50 can reduce ground control costs.
- Amex™ LD 50/50 is free flowing so it can be poured into downholes or used in a pneumatic loader.

Technical Properties

<table>
<thead>
<tr>
<th></th>
<th>Loose Poured</th>
<th>Blow Loaded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density (1)</td>
<td>0.41 g/cc</td>
<td>0.6 g/cc</td>
</tr>
<tr>
<td>Relative Effective Energy (2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relative Weight Strength</td>
<td>66%</td>
<td>83%</td>
</tr>
<tr>
<td>Relative Bulk Strength</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To ANFO @ 0.8 g/cc</td>
<td>34%</td>
<td>62%</td>
</tr>
<tr>
<td>To ANFO @ 0.95 g/cc</td>
<td>26%</td>
<td>47%</td>
</tr>
<tr>
<td>Velocity of Detonation Range (3) (km/s)</td>
<td>2.3-3.4</td>
<td>2.3-4.0</td>
</tr>
</tbody>
</table>

Recommendations for Use

Blasthole Diameter
The minimum recommended hole diameter for pneumatically loaded Amex™ LD 50/50 is 32mm and for loose poured Amex™ LD 50/50 is 76mm.

Blasthole Depth
Amex™ LD 50/50 can be used in blastholes of any practical depth.

Priming and Initiation
Amex™ LD 50/50 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™ LD 50/50 is not recommended.

Charging
Initial recommended pressure for pneumatic charging is 350-400 kPa.
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.

Reactive Ground and Ground Temperature
Reactive Ground (4) – Amex™ LD 50/50 is not suitable for use in ground containing reactive sulphides.

Elevated Temperature (4) – Amex™ LD 50/50 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™ LD 50/50 is available in 10kg bags. Please contact your local Orica representative for more information.

Product Quality
Amex™ is manufactured using an ISO9001 accredited quality process.

Storage and Handling

Product Classification
Authorised Name: Amex™ LD 50/50
Proper Shipping Name: Explosive, Blasting, Type B
UN No: 0082
Classification: 1.1D

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

Store Amex™ LD 50/50 in a magazine suitably licensed for Class 1.1D explosives. Amex™ LD 50/50 has a storage life of 4 months in in stable, temperate conditions. However exposure to hot or cold extremes may cause the product to deteriorate prematurely. Amex™ LD 50/50 is readily desensitised by water.

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™ LD 50/50 make it 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™ LD 50/50 can be initiated by extremes of shock, friction or mechanical impact. As with all explosives, Amex™ LD 50/50 should be handled and stored with care. Amex™ LD 50/50 does not burn easily, but it must be kept clear of flame and excessive heat. Amex™ LD 50/50 is readily desensitised by water.

Explosives based on Ammonium Nitrate such as Amex™ LD 50/50 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/cm³. 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.