**Description**
Centra™ Intense bulk emulsion explosive is a high density, booster sensitive pumped explosive. Centra™ Intense provides superior performance under wet or dry conditions.

**Application**
Centra™ Intense has been specifically tailored for use in extreme conditions such as ditching and marine blasting where a more robust bulk product is required.

**Key Benefits**
- The integrated product and delivery systems of the Centra™ Intense bulk system ensure accuracy, productivity, and dependability of supply.
- Centra™ Intense pumped emulsion reduces spillage and with excellent water resistance, minimizes nitrate leaching and the potential environmental impact.
- Centra™ Intense provides fully coupled explosive charges to maximize blasting outcomes.
- Centra™ Intense delivers maximum reliability in dry and wet blastholes.
- Centra™ Intense provides increased shock for fragmentation resulting in increased mine efficiency and productivity.
- OH&S issues around the handling and storage of packaged products are eliminated.

**Recommendations for Use**

**Priming and Initiation**
Centra™ Intense can be reliably initiated using a cartridge of Senatel™ packaged explosive, Pentex™ or equivalent primer in conjunction with an Exel™ detonator. The cartridge diameter of Senatel™ packaged explosive should be appropriate to the blasthole size. Alternatively, Centra™ Intense can be initiated using an appropriately sized Pentex™ AP primer in conjunction with an Exel™ detonator. Use of detonating cord may adversely affect the performance of Centra™ Intense and could result in misfires.

**Technical Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Percent Emulsion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density (g/cc)</td>
<td>1.20</td>
</tr>
<tr>
<td>Minimum Blasthole Diameter</td>
<td>1.5 inch</td>
</tr>
<tr>
<td>Hole Type</td>
<td>Wet or Dry</td>
</tr>
<tr>
<td>Delivery System</td>
<td>Pumped</td>
</tr>
<tr>
<td>Recommended Pentex™ Primer for minimum hole diameter</td>
<td>See below</td>
</tr>
<tr>
<td>Typical VOD (3)</td>
<td>6.0 m/s (1,000's)</td>
</tr>
<tr>
<td>Relative Effective Energy (REE) (4)</td>
<td>RWS 95</td>
</tr>
<tr>
<td>Sleep time</td>
<td>1 month</td>
</tr>
</tbody>
</table>

**Charging**
Centra™ Intense is delivered by Orica bulk surface equipment. Contact an Orica Technical Representative for further information.

**Sleep-Time within Blastholes**
The recommended maximum sleep time is 1 month. Sleep time is dependent on factors such as hole diameter, density, ground water conditions, initiation system, and mining method. An Orica Technical Representative should be consulted if special conditions exist.

**Ground Temperature**
These products are available for use in ground temperatures 0°C (32°F) to a maximum of 55°C (131°F). If your application requires you to operate outside this temperature range please contact an Orica Technical Representative.
TECHNICAL DATA SHEET

Centra™ Intense System
USA & Canada

Storage and Handling
Product Classification – USA & Canada
Authorized Name: Centra™ Intense 100
Correct Shipping Name: Explosive, blasting, type E
UN No: 0332
Classification: 1.5D

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

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 Services Representative for information on safe practices.

Safety
Centra™ Intense is relatively insensitive to accidental initiation by shock, friction, or mechanical impact under normal conditions of use. Detonation may occur from heavy impact or excessive heating, particularly under conditions of confinement.

Explosives based on Ammonium Nitrate such as Centra™ Intense may react with pyritic materials 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 pyritic or other reactive material.

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Emergency Telephone Numbers
For chemical emergencies (24 hour) involving transportation, spill, leak, release, fire or accidents:
Canada: Orica Canada emergency response 1-877-561-3636
USA: Chemtrec 1-800-424-9300

Notes:
(1.) Nominal density only.
(2.) Where ground movement is likely or charge lengths are in excess of 20 feet (6.1 meters) Orica recommends extra insurance priming.
(3.) The actual VOD depends on the conditions of use including the diameter of the hole and the degree of confinement. VODs can be higher in holes greater than 4 inches (102mm).
(4.) The “Relative Effective Energy (REE) of an explosive is the energy calculated to be available to do effective blasting work. All energy values are calculated using the IDeX™ computer code owned by Orica for the exclusive use of its companies. Energy values are based on standard ANFO with a density of 0.84 g/cc and a cut-off pressure of 100Mpa. Other computer codes may give different values.