TECHNICAL DATA SHEET

Ammonium Nitrate
USA, Canada and Mexico

Description
Low density Industrial Grade Prills.

Application
Prilled Ammonium Nitrate (NH₄NO₃) is the primary oxidizer used in the production of ammonium nitrate fuel oil mixtures (ANFO); the most cost-effective bulk explosive for dry, surface and underground blasting applications.

Key Benefits
• Manufacture of Ammonium Nitrate / Fuel Oil blends, bulk emulsion blends, packaged emulsion products, packaged slurry products, and NCN explosives.
• Ammonium Nitrate is transported as an oxidizer.

Packaging
Bagged Production: Available in 25 kg (55 lb) two-ply polyethylene valve bags, or 25 kg (55 lb) polypropylene bags.

FIBC Production: Available in 400 kg (882 lb) to 1000 kg (2205 lb) capacities.

Bulk: Available in road truck, or rail car quantities (volumes per DOT restrictions).

Storage and Handling
Storage
Due to its hygroscopic nature, it is important that the product be stored in dry silos or storage sheds, and not in humid or wet conditions. The internal crystalline structure of the product transitions at 32° C (90° F) and -18° C (0° F). In conjunction with these changes there are corresponding volume changes of 3.6% and 2.8% respectively. Repeated cycling through these temperatures can break down the structure of the product. This is most important during summer and winter months, where day/night temperature variations pass through either of these transition temperatures. If such exposure is unavoidable, expedient consumption is recommended. If there is any concern an Orica Technical Representative should be contacted.

Technical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulked Density (g/cc)</td>
<td>0.74 – 0.87</td>
</tr>
<tr>
<td>Oil Absorption (wt%)</td>
<td>&gt; 5.7</td>
</tr>
<tr>
<td>Size Distribution (wt%)</td>
<td>Tyler 6 – 20 (3.3 – 0.83 mm) &gt; 95%</td>
</tr>
<tr>
<td>Total Nitrogen (wt%)</td>
<td>&gt; 34</td>
</tr>
<tr>
<td>Moisture¹</td>
<td>&lt; 0.25</td>
</tr>
<tr>
<td>Coating (wt%)</td>
<td>0.04 - 0.15 organic</td>
</tr>
<tr>
<td>PH (10% solution)</td>
<td>4.5 – 6.0</td>
</tr>
</tbody>
</table>

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.

Product Classification USA
Authorized Name: Ammonium nitrate
Proper Shipping Name: Ammonium nitrate
UN No: 1942
Classification: 5.1

Product Classification Canada
Authorized Name: Ammonium Nitrate
Proper Shipping Name: Ammonium Nitrate
UN No: 1942
Classification: 5.1

All regulations pertaining to the handling and use of such explosives apply.
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Safety
Ammonium Nitrate poses the following hazards:
• Supports combustion
• Decomposes with excessive heating, releasing toxic fumes
• Potential for fire of explosion if heated during confinement
• Thermal and chemical burns
• Toxic to aquatic organisms

See the MSDS for complete product details.

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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.) Ammonium Nitrate is hygroscopic. Any contact with moisture or humid air can weaken and break down the prill's internal crystalline structure.