SEISPRO®

Seismic Emulsion

Product Description
SEISPRO is a seismic emulsion explosive specifically designed for the harsh Canadian winter environment. With a high rate of detonation, SEISPRO produces an excellent elastic wave profile and is environmentally friendly: NO perchlorates or molecular explosives and benign products of detonation (water vapor, carbon dioxide and nitrogen). Designed for geophysical exploration, SEISPRO desensitizes more quickly than conventional, molecular explosives.

Application Recommendations
• NEVER use Dyno Nobel seismic explosive products and/or components with explosive products and/or components made by other manufacturers.

Energy* (cal/g) 1,000
Gas Volume* (moles/kg) 35.5
Velocity* (m/sec) 5,900
( ft/sec) 19,350
Detonation Pressure (Kbars) 103
Density (g/cc) 1.18
Water Resistance Excellent

*All Dyno Nobel Inc. energy and gas volume values are calculated using PRODET™, the computer code developed by Dyno Nobel Inc. for its exclusive use. Other computer codes may give different values.

Unconfined 2 ¼ diameter x 4.4 lb charge.

IMPORTANT!
Ignoring these warnings may result in injury or death!
• ALWAYS exercise extreme caution when approaching a shothole that has not vented. Venting gases after detonation are common. BLOWOUTS CAN INJURE OR KILL.
• NEVER attempt to alter the product by cutting, sawing or disassembly of the package.
• NEVER drop load explosive into a borehole.
• NEVER attempt to dislodge explosives by pushing with a drill stem.
• NEVER unshunt electric detonators prior to use except to test with blasting galvanometer.
• ALWAYS shunt electric detonators and/or the blast circuit after testing and keep shunted until connected to blasting machine.
• NEVER use light core load “Cut to Fit” (10.6 grains/foot, 2.2 grams/meter) detonating cord to prime SEISPRO.
• ALWAYS ask if you don’t know before proceeding.

Hazardous Shipping Description
Explosive, Blasting, Type E 1.1D UN 0241 II
Application Recommendations (continued)
• **ALWAYS** use the Dyno Nobel high strength seismic detonator for optimum results.
• **ALWAYS** use built-in cap wells for seismic detonators. Two detonators are recommended for insurance and reliability where extreme environmental conditions are encountered.
• **NEVER** use light core load “Cut to Fit” (10 gains/foot, 2.2 gm/m) detonating cord.
• In-hole service life in water filled boreholes: 3 months in unpunctured plastic shell.
• Recommended temperature range is -20°C to 65°C (0°F to 150°F). For temperatures below 0°F (-20°C), a sleep (warm-up) time of 4 hours is recommended before detonation.

Transportation, Storage and Handling
• SEISPRO must be transported, stored, handled and used in conformity with all applicable federal, state, provincial and local laws and regulations.
• Packaged emulsions have a shelf life of one (1) year when stored at temperatures between -18º C and 38º C (0º F and 100º F). Explosive inventory should be rotated. Avoid using new materials before the old. For recommended good practices in transporting, storing, handling and using this product, see the booklet “Prevention of Accidents in the Use of Explosive Materials” packed inside each case and the Safety Library Publications of the Institute of Makers of Explosives.

Packaging
SEISPRO is available in a plastic shell.

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<tr>
<th>Part Number</th>
<th>Nominal Unit Size</th>
<th>Package Style</th>
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<tbody>
<tr>
<td>IL 50437125E</td>
<td>36 mm (1.4 in) x 1/8 kg (.275 lb)</td>
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<tr>
<td>IL 50437250</td>
<td>36 mm (1.4 in) x 1/4 kg (.55 lb)</td>
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<td>IL 50460100E</td>
<td>60 mm (2.4 in) x 1.0 kg (2.2 lb)</td>
<td>Coupled</td>
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