

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.

USE CAUTION WHEN SLEEP TIME IS ANTICIPATED

A loaded hole that is not shot immediately after the detonator tests positive with a ShotPoint Tracker™ or other testing device could fail for reasons beyond the control of the drill crew and product manufacturer. Reasons for failure could include but are not limited to geologic shifting, lightning, vandalism, farmer or animal interference.

Application Recommendations

- **NEVER** use Dyno Nobel seismic explosive products and/or components with explosive products and/or components made by other manufacturers.

Technical Information



Properties

MSDS
#1146

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

^aAll 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.

^bUnconfined 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

- **ALWAYS** use the Dyno Nobel Electric Super Seismic high strength detonator.
- **ALWAYS** punch paper cartridges with a brass priming awl or use built-in cap wells for seismic detonators. Two detonators are recommended for insurance and reliability where extreme environmental conditions are encountered.
- **ALWAYS** use 50 gr/ft (10.6 g/m) or higher core load detonating cord with a double wrap clove hitch knot when initiating SEISPRO with detonating cord.
- **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 or 30 days in paper tube 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 -18° C and 38° C (0° F and 100° 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 with coupler or a paper tube shell with positive spiral coupling sleeve to connect cartridges for increased charge weights as desired.

Part Number	Nominal Unit Size	Package Style
IL 50437250	36 mm (1.4 in) x 1/4 kg (.55 lb)	Plastic Shell
IL 50457001	60 mm (2.4 in) x 1.0 kg (2.2 lb)	Plastic Shell
IL 50460100E	60 mm (2.4 in) x 1.0 kg (2.2 lb) Coupled	Plastic Shell

Other sizes may be available upon request. Contact your Dyno Nobel representative for details.

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