

SEISPRO™ dBX™

Premium Seismic Emulsion



Product Description

SEISPRO dBX is a high energy, seismic emulsion explosive engineered to increase elastic waves by coupling the explosive energy to the earth. SEISPRO dBX technology offers a moderate velocity of detonation and low post-detonation gas production which produces improved seismic energy across usable bandwidth for superior final data as well as improved signal-to-noise ratios. Designed for geophysical exploration, SEISPRO dBX desensitizes more quickly than conventional, molecular explosives. SEISPRO dBX: the next generation of emulsion seismic 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.
- **ALWAYS** use the Dyno Nobel Electric Super Seismic high strength detonator.

Technical Information



Properties

MSDS
#1146

Energy ^a (cal/g)	1,375
Gas Volume ^a (moles/kg)	25.7
Velocity ^b (m/sec)	4,700
(ft/sec)	15,400
Detonation Pressure ^c (Kbars)	66
Density (g/cc)	1.20
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 dBX.
- **ALWAYS** ask if you don't know before proceeding.

Hazardous Shipping Description

Explosive, Blasting, Type E 1.1D UN 0241 II



SEISPRO™ dBX™

Technical Information



Application Recommendations

- **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 dBX 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 dBX 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 dBX 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 504571105	57 mm (2.25 in) x 1/2 kg (1.1 lb)	Paper TS
IL 50457101	60 mm (2.4 in) x 1 kg (2.2 lb) W/C	Plastic Shell

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

Product Disclaimer Dyno Nobel Inc. and its subsidiaries disclaim any warranties with respect to this product, the safety or suitability thereof, or the results to be obtained, whether express or implied, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND/OR OTHER WARRANTY. Buyers and users assume all risk, responsibility and liability whatsoever from any and all injuries (including death), losses, or damages to persons or property arising from the use of this product. Under no circumstances shall Dyno Nobel Inc. or any of its subsidiaries be liable for special, consequential or incidental damages or for anticipated loss of profits.

Dyno Nobel Inc.

2795 East Cottonwood Parkway, Suite 500, Salt Lake City, Utah 84121 USA
Phone 800-732-7534 Fax 801-328-6452 Web www.dynonobel.com

DYNO
Dyno Nobel

Groundbreaking Performance™