

NONEL[®] LP 1.4B

Technical
Information



Nonelectric Long Period Delay Detonator



Product Description

NONEL[®] nonelectric delay detonator LP units consist of a length of yellow shock tube with a High Strength detonator attached to one end and the other end sealed. A blue J-hook, with pad-printed delay period, is affixed near the sealed end, providing easy means of connection to detonating cord. Easy-to-read, color-coded delay tags display the delay number and nominal firing time prominently.

NONEL LP units are designed to provide in-hole delay time for underground (non-coal) and special construction blasting applications that require long delay times to improve relief and fragmentation (such as drift development, raise and shaft work, as well as slope and tunnel blast rounds). They are typically used with detonating cord, but can also be used with NONEL EZTL™, and NONEL TD detonators for additional timing flexibility.

Application Recommendations

For detailed application recommendations, **ALWAYS** request a copy of Dyno Nobel's *Product Manual: NONEL[®] and PRIMACORD[®]* from your Dyno Nobel representative.

- **ALWAYS** use the plastic J-hook when using a detonating cord trunkline to tie-in NONEL LP nonelectric delay detonators. A minimum 3 g/m (18 gr/ft) detonating cord trunkline is required for use with the J-hook.

Properties

SDS
#1122

Net Explosive Content per 100 units 0.0885 kg
0.1951 lbs

Period / Delay Time (msec)	Delay Tag Color	Period / Delay Time (msec)	Delay Tag Color
0 / 0	Pink	10 / 3500	Green
1 / 500	White	11 / 3900	Yellow
2 / 800	Lt Blue	12 / 4400	Red
3 / 1100	Orange	13 / 4900	White
4 / 1400	Green	14 / 5400	Lt Blue
5 / 1700	Yellow	15 / 5900	Orange
6 / 2000	Red	16 / 6500	Green
7 / 2300	White	17 / 7200	Yellow
8 / 2700	Lt Blue	18 / 8000	Red
9 / 3100	Orange		

Hazardous Shipping Description

Detonator assemblies, nonelectric,
1.4B, UN 0361 PG II



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Application Recommendations (continued)

- **ALWAYS** ensure the shock tube is connected at right angles to the detonating cord trunkline and that the shock tube leads returning to the hole collar do not cross over or lay near any detonating cord trunkline. If the detonating cord touches the shock tube or is closer than 6 inches (15 cm), the shock tube may be damaged and misfires may result.
- **ALWAYS** connect detonating cord using approved knots and tight connections. Place detonating cord hook-ups in closed loops and use with cross-ties.
- **NEVER** put more than 20 NONEL LP delays per bunch. A minimum 5 g/m (25 gr/ft) detonating cord is required for bunch blasting.
- **NEVER** cut or trim seals from the shock tube of a NONEL LP delay. If shock tubing is cut or is suspected of being cut or damaged during loading, always reprime the borehole using a new unit of the same delay period.
- **NEVER** drive any equipment over the shock tube or detonating cord. Whenever charging from a maneuverable basket, platform or boom, always make sure that no shock tube or detonating cord is entangled or can become entangled.
- **ALWAYS** make sure that no shock tube or detonating cord can be pinched between the basket, platform or boom and the face, ribs, back or floor. Rupturing or damaging shock tube or detonating cord may cause misfires.
- Where NONEL LP detonator lead lengths permit, bunch blasting provides the most efficient means of hooking up rounds in drifts, tunnels, shafts and raises.

Transportation, Storage and Handling

- NONEL LP must be transported, stored, handled and used in conformity with all federal, state, provincial and local laws and regulations.
- For maximum shelf life (3 years), NONEL LP must be stored in a cool, dry, well ventilated magazine. 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

Length		Case Type	Quantity / Case
m	ft		
3.5	12	D*	60
4.5	16	D*	45
6	20	D*	45
7	24	D*	45

- Length rounded to nearest one-half meter.
 - Case weight varies by length & delay; see case label for exact weight.
- * Always shipped with 2 cases strapped together. Case dimension width doubles.

Case Dimensions Detpak (D)

44 x 22 x 25 cm 17 ½ x 8 ¾ x 10 in

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