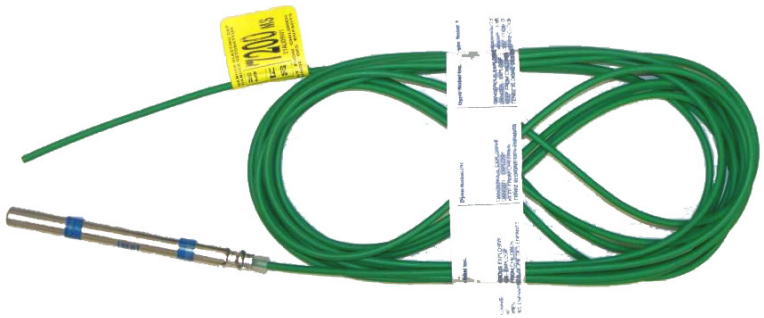
PRIMALINE® SMS

Salt Mine Series

Technical Information



Product Description

PRIMALINE SMS units consist of a High Strength detonator attached to a green 0.9 g/m (4 gr/ft) PRIMALINE detonating cord lead. Easy-to-read, color-coded delay tags display the period number and nominal firing time prominently.

PRIMALINE SMS units are designed for use with detonating cord trunklines to provide effective and accurate timing. Because of the self-consuming nature of the PRIMALINE SMS lead, these units are ideally suited for those mining operations, such as salt and chemical limestone, where contamination (by copper wire or plastic tubing) of the material blasted cannot be tolerated.

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 non-cap sensitive explosives* in all holes initiated with PRIMALINE SMS units. The PRIMALINE SMS lead can initiate a cap sensitive explosive column and bypass the detonator delay causing a misfire, which may kill or injure
- **ALWAYS** maintain right angles (90°) between the PRIMALINE SMS lead and the detonating cord trunkline when making knot connections. PRIMALINE SMS units are initiated via a detonating cord trunkline of at least 5 g/m (25 gr/ft) such as PRIMALINE 5 detonating cord, which has a tacky surface giving it good knot holding characteristics

Properties

SDS #1123

Net Explosive Content per 100 units*

H4**416	5 m 16 ft	.50 kg 1.1 lbs	Green PRIMALINE
H4**420	6 m 20 ft	.61 kg 1.3 lbs	Green PRIMALINE
C4**424	7 m 24 ft	.71 kg 1.6 lbs	Clear PRIMALINE

* All weights and dimensions are approximate

Period / Delay Time (msec)	Delay Tag Color	Period / Delay Time (msec)	Delay Tag Color
0 / 0	Orange	9 / 450	Orange
1 / 50	Red	10 / 500	Yellow
2 / 100	Green	11 / 600	Tan
3 / 150	Orange	12 / 1000	White
4 / 200	Yellow	13 / 1400	Red
5 / 250	Tan	14 / 1800	Green
6 / 300	Lt. Blue	15 / 2400	Orange
7 / 350	Red	16 / 3000	Yellow
8 / 400	Green	17 / 3800	Tan

Hazardous Shipping Description

Detonator assemblies nonelectric,
1.1B UN 0360 PG II

See Product Disclaimer on page 2

DYNO Dyno Nobel

Groundbreaking Performance™

PRIMALINE® SMS

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Application Recommendations (continued)

- **ALWAYS** tie the PRIMALINE SMS lead to the trunkline using a double wrap clove hitch. This particular knot provides the necessary surface area contact to initiate the minimal coreload Primaline SMS leads
- **ALWAYS** make a closed loop of trunkline to provide two paths of initiation to each PRIMALINE SMS lead
- **ALWAYS** ensure that the ANFO is properly formulated and is being used according to the manufacturer's instructions. If ANFO cannot be used (due to the presence of water, for example), a non-cap sensitive primer or plastic shell slip-on-booster should be used
- **NEVER** use nitroglycerin or nitrostarch-based explosives with PRIMALINE SMS units
- **NEVER** hold the PRIMALINE SMS lead in your hand when initiating it. The PRIMALINE SMS lead is a low coreload detonating cord that detonates along its entire length. Any contact during initiation may kill or injure
- **NEVER** splice the PRIMALINE SMS leads with any PRIMACORD® or PRIMALINE® detonating cords. The PRIMALINE SMS lead will not initiate itself or any other detonating cord through a knot and such a connection could cause misfires
- **NEVER** use cartridge powders as primers unless they are non-cap sensitive or do not come in contact with the PRIMALINE SMS lead
- **ALWAYS** be certain that only non-cap sensitive explosives are loaded with PRIMALINE SMS units since the PRIMALINE SMS lead may initiate the blast hole columns and bypass the delay

Transportation, Storage and Handling

- PRIMALINE SMS 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), PRIMALINE SMS 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		
4.5	16	Detpak	360
6	20	Detpak	320
7	24	Detpak	280

- Length rounded to nearest one-half meter.
- Case weight varies by length & delay; see case label for exact weight.

*** NOTE:** According to the Institute of Makers of Explosives (IME) Safety Library Publication No. 12, "Glossary of Commercial Explosives Industry Terms", a cap sensitive explosive material is *an explosive material which will detonate with an IME No. 8 TEST DETONATOR when the material is unconfined.*

Case Dimensions

Detpak 48 x 45 x 26 cm / 18¾ x 17¾ X 10¾ in

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