

MINOVA

LOKSET™ TOOSPEEDIE™

TWO SPEED RESIN, ANCHORING MEDIUM



Lokset capsule colours and retainers may differ based on specification.

DESCRIPTION

The LOKSET™ TOOSPEEDIE™ is a two-speed resin capsule that consists of a reinforced, thixotropic polyester resin mastic in one compartment and an organic peroxide catalyst separated by a physical barrier in the other. The capsules are available in 30:70, 40:60 or 50:50 ratios of fast: slow speeds. Rotation of the bolt during installation ruptures the capsule, shreds the skin and mixes the two components, causing a chemical reaction and transforming the resin mastic into a solid anchor medium.

APPLICATION AND USES

- > The Lokset Toospeedie resin capsule is used primarily as an anchoring medium for rockbolts and long tendons. They provide roof and sidewall support in mines and tunnels. Can be used with both hydraulic and pneumatic roof bolters. Other uses include:
- > Marine fixings above or below water
- > Ground anchors in rock
- > Fixtures to building structures
- > Pipe and cable support fixings
- > Crane and rail track fixing
- > Anchoring bolts for machinery

ADVANTAGES

- > High mechanical performance - adhesion, compressive and shear strength
- > Rapid & simple installation process without the use of a pump
- > Quick setting resin allows the anchorage to be loaded quickly
- > High resistance to vibrations (blasting, vibrating equipment)
- > Highly durable, reduces the risk of steel anchorage corrosion

TECHNICAL PROPERTIES

Lokset™ TOOSPEEDIE™ resin capsules are for any temperatures up to 35 °C.

SET TIME COMBINATION 20°C	MIXING TIME
15 sec / 120 sec	6 sec or Spin-to-stall
15 sec / 5-10 min	6 sec or Spin-to-stall
30 sec / 5-10 min	10 seconds
60 sec / 5-10 min	30 seconds
120 sec / 5-10 min	20 seconds

For further information on capsule types- size and speed consult one of our representatives

APPLICATION METHOD

(Please refer to one of our representatives to assist with determining the correct bolt, hole and resin capsule parameters).

1. Insert the necessary resin capsules into the hole.
2. Push the bolt up the hole to at least 300mm from the collar. (Rotation of the bolt during this step is optional)
3. Rotary drills: rotate the bolt rapidly (250- 750rpm) for the specified mixing time, while pushing the bolt home. Percussion drills: rotate the bolt 40-60 revolutions.
4. Hold for the required time (note effect of temperature on set times).
5. Do not rotate again as damage to partially gelled resin may result. The period of strength development following set will vary, depending on set time and product temperature. The bolt may be tensioned after the required hold time.
6. Resin bolts should be installed as soon as possible in a newly exposed roof.

For optimum results, it is important to ensure careful control of:

1. Hole diameter i.e. bit size.
2. Hole length, i.e. length of drill rod.
3. Use of sufficient resin to anchor the desired length of the bolt to the surrounding strata.
4. A minimum of 500mm of resin bond is recommended to ensure long-term anchor strength of end-anchored bolts.

Modern mechanized mining equipment is capable of installing resin-grouted bolts safely, reliably and efficiently. Please consult one of our Representatives to assist when considering strata-control methods to use with mechanized mining.

SAFETY INSTRUCTIONS AND LIMITATIONS

Observe the usual precautionary measures for handling chemicals and refer to the Lokset MSDS. In case of incorrect anchor selection, wrong hole dimensions or the incorrect anchoring method, i.e., lack of anchor rotation or low rotation speed, the capsule components might be insufficiently mixed. In such cases, the bond strength may be less than the theoretical strength. The capsules should not be used in weak, loose, incoherent or highly porous soil, such as sands and clays. Capsules should not be used in holes with flowing water, with a strong presence of water and near groundwater sources. When working with resin capsules wear, safety gloves, goggles and protective clothing. Do not open or puncture capsules prior to use. If clothes become saturated with any of the capsule's components it is recommended to change into a set of clean clothing. For skin contact, wash thoroughly with soap and water. For detailed safety information, please refer to the corresponding Material Safety Data Sheet.

PACKAGING AND TRANSPORTATION

Other diameters may be available, please consult one of our representatives.

The capsules are packed in cardboard cartons and supplied on wooden pallets, shrink-wrapped.

LOKSET™ TOOSPEEDIE™ RESIN CAPSULE OPTIONS	
Length	900 mm; 1000 mm; 1050 mm; 1350 mm
Nominal diameter	23 mm; 25 mm; 30 mm

STORAGE CONDITIONS AND SHELF LIFE

Suggested shelf life for Lokset Toospeedie resin capsule is 4 months when stored between 20- 25°C. Extended shelf life can be expected when stored at lower temperatures of 0-5°C in cool rooms and is highly recommended. Stock rotation is strongly recommended. Storage at higher temperatures will severely reduce shelf life.

Store in a cool, dry place away from direct sunlight. Do not double stack pallets. When using cool room storage, the resin capsules should be allowed time to attain ambient temperature before use otherwise SPIN and HOLD TIMES will be extended.

TECHNICAL SUPPORT

We provide technical advisory service by a team of specialists in the field. The service includes on-site assistance and advice on evaluation trials and laboratory work.

DISPOSAL

Follow local regulations.

MANUFACTURER

Minova International Ltd

Africa Office:
23 Botha Street, Alrode, 1451
South Africa

CUSTOMER SERVICE

Minova International Ltd

+ 27 (11) 9231900

Email: salesorders.africa@minovaglobal.com

Website: www.minovaglobal.com

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