# CHEMILINK<sup>TM</sup> SS-241

## Non-Shrinkage General Purpose Grout

#### Description

Chemilink<sup>™</sup> SS-241 is a grey powder mix of special cements, graded aggregate and chemical additives which impart controlled expansion whilst in the plastic state. The gaseous expansion system compensates for shrinkage and settlement in the plastic state. This material requires only the addition of water to produce a smooth free-flowing and non shrink grout. It is non-toxic, non-dusting and does not contain iron. Chemilink<sup>™</sup> SS-241 is the result of extensive research, development and commercial trials and is manufactured under strict quality control.

#### **Typical Uses**

- All general purpose grouting;
- Precast and presented panels;
- Grouting in column bases, base infilling;
- Filling core holes, rod holes and defects in concrete;
- Fill in grout for hollow block walls;
- Joints between pre-cast panels and other joints;

#### ii. Underplate Grouting

WASTE ENGINEERING

All surfaces should be free from laitence, oil, grease and any loosely adhering material. Prior to grouting the cleaned foundations should be thoroughly saturated with clean water and any excess water removed. All shuttering used should be grout tight to prevent losses and should have a minimum head height of 75mm at the point of entry. Grouting should be carried out from one side only with bleed holes suitably arranged to expel air and any surplus water. All vibrational disruption of the setting grout should be avoided.

#### iii. Ground Anchors and Bolting

Chemilink<sup>™</sup> SS-241 can be used for the grouting of ground anchors and foundation bolts. For grouting of anchor and foundation bolts, the holes should be generally 20-50mm greater in diameter than the bar, and must be clean; holes with smooth sides (e.g. cast or diamond drilled) must be suitably roughened to provide adequate mechanical key. The interior of the hole should be thoroughly saturated with clean water, and excess water removed before the grout is placed. It is normal practice to fill the hole with grout before the bolt is inserted, but if it is necessary to first position or suspend the bolt from the structure of machine to be fixed, then care must be taken when pumping the grout to avoid air locks etc., within the annulus.

- Tilt slab panels;
- Caulking of joints and pipes.

#### **Technical Data**

- Compressive Strength at 28 days: > 40.0 MPa
- Flow Consistency: 10 30 sec
- Expansion at 3 & 28 days: < 40%
- Shrinkage at 28 days: 0%
- Setting Time:
  - ➢ Initial Set: ≥ 1 hour
  - ➢ Final Set: ≤ 10 hours

### Preparation

#### i. Injection Grouting

Chemilink<sup>™</sup> SS-241 is suitable for most injection grouting applications; all cables should be cleaned immediately prior to grouting and ducts formed with sheaths flushed with water, the excess water being removed.

#### iv. Other Applications

Other uses of Chemilink<sup>™</sup> SS-241 include: forming joints between precast units, bedding load bearing wall units, gap filling behind panels or permanent formwork, the reinstatement of existing structures.

#### Mixing

Either a powered paddle mixer or a static blade/revolving drum mixer is recommended for mixing, the batch size being adjusted to allow the grouting process to be continuous. Mixing should be carried out by adding the Chemilink<sup>™</sup> SS-241 powder to the required volume of water in the mixer (with the mixer running) and mixing for approximately 3 minutes, or until a smooth homogeneous grout is produced. Optimum grout properties will be obtained using 4.5 litres of water per 25kg of Chemilink<sup>™</sup> SS-241; this will yield 13.5 litres of mixed grout. Lower quantities of water will produce correspondingly thicker grouts and slightly reduced volume yields and higher 24 hour strengths, for example a ratio of 3.5 litres/25kg of Chemilink<sup>™</sup> SS-241 will yield 13 litres of mixed grout.

# WASTE ENGINEERING ZERO

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#### Placing

Chemilink<sup>™</sup> SS-241 should be placed within 30 minutes after mixing. Use only a fresh mix after that time.

#### Curing

It is essential that all exposed areas of Chemilink<sup>™</sup> SS-241 are properly cured for at least three days with wet hessian and polythene sheet.

#### Package, Coverage & Storage

Package: 25kg/bag Coverage: 13.5 litres per 25kg bag Shelf Life: 6 to 12 months from date of manufacture when stored sealed in a cool and dry place.



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Our technical advice on the uses of our materials is given without obligation. The buyer is responsible for the application and processing of our products, and he is also liable for observing any third party rights. Technical data concerning our products are typical values.

## **CHEMILINK<sup>TM</sup> TECHNOLOGIES & PRODUCTS**

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