



## Product Data Sheet

# ALLIED

## SSH 100

### DESCRIPTION

Allied SSH 100 is a hardener system for use with sodium silicate grouts to stabilize pervious soils, control water inflows, and create grout curtains. It exhibits the following benefits:

- Improved longevity compared to other sodium silicate grouts.
- Longer working times.
- Low viscosity until gelation.
- Good penetrability.
- Resistant to alkalis, hydrocarbons, salts and bacteria.

### TYPICAL FORMULATION FOR SOIL GROUTING

#### A- Component

Water: 20parts (volume)

Sodium Silicate (40-42° Beaume): 80 parts (volume)

Dye (blue) (enough to colour the mix)

#### B- Component

Water: 80 parts

SSH 100: 20 parts

Dye (yellow) (enough to colour the mix)

Mixing ratio A/B = 1/1

Colour of mixed product: green.

### SET TIME OF ABOVE INFORMATION

| TEMPERATURE: | APPROXIMATE SET TIME: |
|--------------|-----------------------|
| 20°          | 20 minutes            |
| 10°          | 40 minutes            |
| 4°           | 1 hour                |

### OTHER CHARACTERISTICS

When injected into the soil pores the heat created by the exothermic reaction is dissipated and the grout cures much slower. The set time also depends on the size of the mixed batch. At any given temperature, by changing the composition of the B component (adding more Allied SSH 100) the set time will be further reduced and render the gel even more permanent. Because of the shorter gel time, at higher concentrations of SSH 100, the penetrability in any given soil is reduced.

OVER

When grouting below the water table, the A component should only contain pure sodium silicate (40 – 42° Beaume), because the (mixed) sodium silicate based grout is miscible with ground-water trapped in the pores.

During a 2 year observation period, soils grouted with the aforementioned formulation remained stable, even when under water (no less of strength).

### **INSTALLATION METHOD**

Ideally, the A and B components are injected via a 2-component piston pump, at a 1/1 ratio to a static mixer, placed as close as practically possible to the injection point.

Injecting small batches of mixed product ( A + B ) is possible, provided the quality of mixed grout is limited of what safely can be injected in a 10 minute period.

#### **NOTE:**

Seller's and manufacturer's only obligation shall be to replace such quantity of the product proved to be defective. Neither seller nor manufacturer shall be liable for any injury, loss or damage, direct or consequential, arising out of the use or the inability to use the product. Before using, user shall determine the suitability of the product for his/her intended use, and user assumes all risk and liability whatsoever in connection therewith.