



SYN.0024

## SYNTECH HAG STABILAND

Polyurethane resin for sealing  
and stabilizing excavations and  
tunnels

### Customs Code

3907 2099

### Packaging

- Can 21.5 kg [A]
- Can 24.5 kg [B]
- Kit: 1 Can 21.5 kg [A] + 1 Can 24.5 kg [B]

### Application

- Injection
- Pump

Family  
**Syntech**

Type  
**Polyurethane hydro expansive resins and related accessories**

Product Lines  
• Aqua  
• Infratech

Functional Categories  
• **Instantaneous stoppage of water infiltrations in buildings**  
• **Structural maintenance of dams, reservoirs, ducts and water ducts**  
• **Structural maintenance of tunnels**  
• **Maintenance interventions on road and railway infrastructures**

Components  
**Two-components**

Appearance  
**Liquid + Liquid**

## General description

SYNTECH HAG STABILAND is a two-component, low viscosity, fast reacting polyurethane resin for injection, developed for waterproofing and consolidating land, mining excavations and tunnels with high water flows or pressures. Given its very low viscosity it is able to seal cracks as thin as a hair. In dry substrates SYNTECH HAG STABILAND mixed and hardened develops a very resistant polyurethane foam with mechanical strengths exceeding 70 MPa after one day.

## General features

When injected, SYNTECH HAG STABILAND reacts via a pump effect. As a result, the resin pushes itself into the porous rock or concrete structure that is to be sealed (principle of self-injection). The low viscosity of the mixture guarantees the sealing of very fine fissures. The quick setting of the material ensures efficient and effective sealing of high flow water leaks. Main characteristics of SYNTECH HAG STABILAND resin:

- Injection in 1:1 volumetric ratio.
- Very low viscosity.
- Sealing hair-sized cracks.
- Increase in volume from 8 to 10 times in humid structures.
- Forms a very resistant polyurethane foam.
- In dry structures the product forms a solid mass.
- Fast hardening.
- Becomes completely waterproof after curing.
- Strengthens process construction.
- CFC-free: does not contain chlorofluorocarbons harmful to the ozone layer.
- Applicable in salt water.
- Good general chemical and microbial resistance.
- Reacts via a pump effect after injection. It pushes into the porous rock or concrete structure that needs to be reinforced (principle of self-injection).

## Dosage

Product consumption depends on the size of the void volume to be filled and on the expansive reaction that is triggered after mixing the two components in relation to the amount of water present.

## Fields of application

Stabilization and waterproofing of porous rock, sand, earth, brick and concrete constructions. Sealing water leaks with high water infiltration in wells, tunnels, dams, canals, mines, etc.



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## Basic features



Density:  
(A+B) 1.150 g/cm<sup>3</sup>

**A:B** Mixing ratio:  
1:1 \_



Quick setting product



Shelf-life:  
12 months



Temperature of use:  
+10 / +30 °C



Use wearing protective glasses



Use wearing protective gloves



Available **colours**  
Amber

## Technical specifications

Breaking load longitudinal after 1 day without water (EN ISO 527): > 37 MPa

Compressive strength after 01 day without water (EN 12190): ± 70 MPa

Concrete adhesion (direct traction) after 1 day without water: > 1.5 MPa

Flexural strength at 01 day without water (EN 13892-2): ± 90 MPa

Hardness Shore D: 75 \_

Viscosity (20 °C): 190 mPas

## Tools cleansing

- Thinner for resins

## Applicable on

- Concrete
- Bricks
- Rock walls
- Porphyry and natural stones
- Calcestruzzo armato

## Instructions for use

The two components A and B of SYNTECH HAG STABILAND are supplied ready to use. They must be mixed in a 1:1 ratio by volume and injected using specific pumping equipment for two-component products equipped with an in-line static mixer. The reaction times of SYNTECH HAG STABILAND are accelerated by the presence of water in the substrate. In the presence of water, the SYNTECH HAG STABILAND resin expands by about 8-10 times the initial volume with reaction times ranging from 25 to 45 seconds. In the absence of water and, therefore, on dry substrates, the end reaction time is 1 minute and 30 seconds. Reaction times increase at lower temperatures and vice versa.

Always scrupulously clean the pump used at the end of the operations with Nitro thinner and the specific lubricating detergent SYNTECH HAG CLEANER.

## Storage and preservation

Store the product in its original packing, in a fresh and dry environment, avoiding frost and direct sunlight. Inadequate storage of the product may result in a loss of rheological performance. Protect from humidity. Store the product at a temperature between +10°C and +30°C.



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## Warnings, Precautions and Ecology

The general information, along with any instructions and recommendations for use of this product, including in this data sheet and eventually provided verbally or in writing, correspond to the present state of our scientific and practical knowledge.

Any technical and performance data reported is the result of laboratory tests conducted in a controlled environment and thus may be subject to modification in relation to the actual conditions of implementation.

Azichem Srl does not assume any liability arising from inadequate characteristics related to improper use of the product or connected to defects arising from factors or elements unrelated to the quality of the product, including improper storage.

Those wishing to utilise the product are required to determine prior to use whether or not the same is suitable for the intended use, assuming all consequent responsibility.

The technical and characteristic details contained in this data sheet shall be updated periodically. For consultation in real time, please visit the website: [www.azichem.com](http://www.azichem.com). The date of revision is indicated in the space to the side. The current edition cancels out and replaces any previous version.

Please note that the user is required to read the latest Safety Data Sheet for this product, containing chemical-physical and toxicological data, risk phrases and other information regarding the safe transport, use and disposal of the product and its packaging. For consultation, please visit: [www.azichem.com](http://www.azichem.com).

It is forbidden to dispose of the product and/or packaging in the environment.

*SYNTECH HAG STABILAND is produced/distributed by*



Via Giovanni Gentile, 16/A - 46044 Goito (MN), Italy  
info@azichem.com Tel. +39 0376.604185 /604365 Fax +39 0376 604398



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