

Highly reactive, two component fire resistant urea-silicate injection resin for ground stabilization.

APPLICATION

SILINJECT 2C FLEX ALT is a two component, silica modified PUR flexible injection resin solvent-free, specifically designed for rapid stabilization of coal, concrete and ground.

- Distortion performance due to its flexibility through mountain movements.
- Stabilizing coal and strata.
- Consolidation of fractured rock, sands, gravels and coal faces.
- Repair of underwater constructions.
- Repair of concrete cracks.

CHARACTERISTICS AND BENEFITS

SILINJECT 2C FLEX ALT neither expands its volume with water nor absorbs water.

- Penetrates cracks wider than 0,25 mm.
- Shows good adhesion to wet substrates.
- Fast reaction also underwater.
- Very fast reacting material applied where structural strength and flexibility is required.
- Fire resistant.
- Low odour.
- Environment friendly.
- User friendly.

APPLICATION PRESCRIPTIONS

Components A and B are delivered ready-to-use. They are injected in the proportion of 1:1 by volume using a two component injection pump equipped with a static in-line mixer.

The curing reaction time is significantly dependent on the temperature of the PU resin, the rock and the ground water. Please store both components prior to application in at least 15°C. To achieve the best mixing of the components during injection, the inclusion of a static in-line mixer in connection with the mixing head is essential. The length of the static mixer should be min. 50cm long for correct mixing.

TECHNICAL DATA

SILINJECT 2C FLEX ALT	Component A	Component B
Colour	Clear, colourless	Dark brown
Density (at 20°C)	1,30 - 1,57 g/cm ³	1,15 - 1,35 g/cm ³
Flash point	> 200°C	> 200°C
Viscosity (at 25°C)	120 - 350 mPa.s	50 - 300 mPa.s

REACTION DATA

Reaction data: A:B = 100:82 by weight at 25°C = 1:1 by volume	
Start of reaction	30 - 80 s
Tack free	180 - 246 s
Foam factor	1,0 X
Compressive Strength PN-C-89 071: 1993 (during the compression of the sample)	42 MPa (average value)
Flexural PN-EN ISO 178:2006 (during the bending of the sample did not break)	16 MPa (average value)
Bonding strength	5 to 7 MPa after 20 min

PACKAGING

Standard packaging:

- Plastic jerrycan: component A = 30 kg
component B = 24,5 kg
- IBC: component A = 1.450 kg
component B = 1.190 kg

STORAGE

If stored in dry conditions in unopened, tightly closed original containers and within a temperature range of +5°C and +35°C, the components of SILINJECT 2C FLEX ALT have a shelf life of 12 months. The manufacturer shall authorize short-term storage in temperatures at 0 - 60°C.

SAFETY AND HEALTH PRECAUTIONS

Do not breathe dust/fume/gas/mist/vapours/spray.

In case of inadequate ventilation wear respiratory protection.

Wear protective gloves/clothing and eye/face protection.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If on skin or hair: Take off immediately all contaminated clothing. Rinse skin with water/shower.

For more information, consult the safety data sheet.