

ATYS-EAM-103

Castable Grout

Description Uses

3-component, solvent free, self-levelling epoxy mortar.

Self-levelling, flowable epoxy mortar on concrete, stone, mortar, steel, aluminum, asbestos cement, wood, polyester and epoxy.

Structural bonding of:

- Starter bars
- Anchors
- Supports
- Braces and tie bars

Grouting of:

- Crash barrier posts
- Bearing plates
- Machine bases
- Mechanical bridge joints
- Bridge bearings

Tie-less rail grouting:

- Crane rails
- In tunnels
- On bridges

Advantages

- Solvent free
- Excellent flowability, also in thin layers
- No shrinkage
- Applicable on mat moist substrates
- Fast through hardening
- High mechanical strengths

Technical Data

Comp. A: yellowish

Comp. B: yellowish

Comp. C: grey

Density (20°C): Comp. A: ~ 1.1 kg/l

Comp. B: ~ 1.0 kg/l

Mix (A+B+C): ~ 2.0 kg/l

Mixing Ratio: A: B: C = 6: 1: (18) parts by weight

A: B: C = 6: 1: (10) parts by volume

Addition of comp. C according to climate conditions and desired application behaviour.

Pot Life

	2 kg	10 kg
30°C	~ 20 min.	~ 15 min.
20°C	~ 40 min.	~ 30 min.
10°C	~ 75 min.	~ 60 min.
5°C	~ 120 min.	~ 90 min.

Strengths

Compressive strength N/mm ²				
	1 day	3 days	7 days	14 days
5°C	-	110.0	120.0	130.0
20°C	110.0	120.0	130.0	130.0

Flexural-tensile strength N/mm ²				
	1 day	3 days	7 days	14 days
5°C	-	25.0	27.0	29.0
20°C	25.0	27.0	29.0	30.0

Adhesive-tensile strength: after 14 days at 20°C according to DIN 53232:

On concrete: ~ 4 N/mm² (concrete failure)

On steel: ~ 15-20 N/mm²

Modulus of elasticity (static): ~ 18'000 N/mm²

Coefficient of thermal expansion: ~ 18×10^{-6} / °K

Shelf life / Storage: 24 months from date of production in unopened original container stored in dry conditions at temperatures between + 5°C and +30°C.

Applicatin

Important: Application- and substrate temperature:

minimum +5°C

maximum +30°C

Layer thickness per application:

minimum 12 mm

maximum 50 mm

Reduced flowability of ATYS-EAM-103 at application/ substrate temperatures > than 10°C. Store material at temperatures of + 20°C - 25°C (room temperature) for at least 24 hours prior to use.

Substrate preparation: All substrates should be clean, free from standing water and all loosely adhering particles.

Cement laitance or rust must be removed. Recommended treatment: For concrete, mortar, stone: sandblasting or high-pressure water blasting; steel, iron: sandblasting, grinding; epoxy, polyester: grinding with coarse sandpaper.

Mixing: Pour all of component B into component A container. Mix with basket type stirrer connected to an electric mixer at low speed (max. 250 rpm) until the originally turbid liquid becomes completely clear. Avoid entraining air. Pour mixture into suitable mixing vessel and add component C. Stir for 3 minutes with electric hand mixer (max. 250 rpm) until mortar of homogeneous consistency is obtained.

Application: Prior to application, rest mix for a short time to allow entrained air to escape. Pour mortar into prepared opening (hopper) and maintain enough static pressure. Ensure, that entrapped air can easily escape.

Large volumes have to be poured in layers. Pour next layer as soon as the previously applied layer has hardened and started to cool.

Industrial packing:

Mix components prepared in the correct mixing ratio as indicated above, in suitable mixing vessel (container).

Opened containers (Comp. A+B) must be closed immediately after use.

Cleaning: Tools and equipment must be cleaned with Colma Cleaner immediately after use. Hardened material can only be removed mechanically.

Safety precautions: The product may cause skin irritation. Wear protective gloves and goggles. Protect skin with barrier cream before work starts. If in contact with eyes or mucous membrane, flush thoroughly with clean warm water and immediately consult your physician.

Ecology: Component A and B contaminate water and may not be allowed to get into the sewage system, waters or soil. Any leftover material must be disposed of properly in accordance with local regulations.

Safety Instructions