Technical Data Sheet

LOGIC UW

High-Performance Epoxy Injection System for Structural Crack Repair, Sealing and Waterproofing

PRODUCT IDENTIFICATION

Parameter	Description
Product Name	Logic UW
Product Type	Two-component injection resin system
Chemical Base	Epoxy resin (A) + Amine hardener (B)
Mixing Ratio	Pressure injection
Application Method	Structural crack repair, waterproofing, and sealing
Intended Use	

PRODUCT DESCRIPTION

Logic UW is a high-performance injection system designed for sealing and repairing cracks in concrete and masonry structures exposed to water ingress and hydrostatic pressure.

The system utilizes advanced micro- and pico-scale penetration technology, enabling deep infiltration into capillary pores and microcracks that are inaccessible to conventional materials.

After curing, Logic UW forms a durable, water-insoluble polymer matrix that restores structural integrity and permanently blocks water pathways.

The system is suitable for wet substrates and can be applied under active water leakage conditions.

FIELDS OF APPLICATION

- Crack injection in concrete and masonry
- Basements and underground structures
- Tunnels and shafts
- Foundations and retaining walls
- Lift pits and water-exposed structures
- Historical buildings and monuments
- Drinking water structures (subject to approval)
- Cold joints and construction joints

KEY PERFORMANCE FEATURES

- Deep penetration into micro- and capillary cracks
- Effective sealing under hydrostatic pressure
- Structural strengthening and bonding
- Permanent waterproof barrier
- Suitable for wet and water-bearing substrates
- High chemical and mechanical resistance
- Long service life (up to 20 years)
- Solvent-free / low emission system

TECHNICAL DATA

Component A (Resin)

Property	Value
Appearance	Liquid
Color	Light yellow / clear
Density (20°C)	1.15 g/ml
Viscosity (20°C)	ca. 6500 mPas
Solids Content	0%

Component B (Hardener)

Property	Value
Appearance	Liquid
Color	Light brown / clear
Density (20°C)	1.05 g/ml
Viscosity (20°C)	ca. 6500 mPas

Mixed Product

Property	Value
Mixing Ratio	1:1
Density (20°C)	1.10 g/ml
Viscosity (20°C)	ca. 6500 mPas
Pot Life (20°C)	30 minutes
Initial Cure Time	4–6 hours
Full Cure Time (12°C)	24 hours

APPLICATION GUIDELINES

Surface Preparation

- Substrate must be structurally sound
- Remove loose particles and contaminants
- Clean cracks from dust and debris

Injection Preparation

- Drill holes at 45° angle
- Spacing: approx. 20–30 cm (depending on crack width)
- Install injection packers securely

Mixing

- Mix component A and B at 1:1 ratio
- Mix thoroughly until homogeneous

Injection

- Use injection pump (approx. 4–6 bar pressure)
- Inject until saturation
- Continue until material flows from adjacent packers

Post-Treatment

- Allow curing time
- Remove packers
- Seal holes with suitable mortar

APPLICATION CONDITIONS

Property	Value
Application Temperature	5 °C to 200 °C
Substrate Temperature	+0 °C
Suitable for Wet Substrates	Yes
Suitable under Water Pressure	Yes

CONSUMPTION

Consumption depends on:

- Crack width and depth
- Substrate porosity
- Injection pressure

Typical Consumption

- 2.5–4 kg/m

CHEMICAL RESISTANCE

Resistant to:

- Water and moisture
- Diluted acids and alkalis
- Salts and groundwater
- Oils and hydrocarbons

SAFETY AND ENVIRONMENTAL INFORMATION

Classification according to Regulation (EC) No. 1272/2008 (CLP)

Signal Word: Danger

Hazard Statements

- H315 Causes skin irritation
- H317 May cause allergic skin reaction
- H319 Causes serious eye irritation
- H411 Toxic to aquatic life with long lasting effects

Precautionary Statements

- P280 Wear protective gloves / eye protection
- P273 Avoid release to environment

Water Hazard Class (WGK): 2

STORAGE AND SHELF LIFE

- Store in original sealed containers
- Protect from frost and direct sunlight
- Storage temperature: under 20 °C
- Shelf life: 24 months

LEGAL NOTICE

The information provided in this Technical Data Sheet is based on laboratory testing and practical experience.

Actual performance depends on substrate conditions, application method, and environmental factors.

The user is responsible for verifying the suitability of the product for the intended application.

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Product: Logic UW

Document Type: Technical Data Sheet (TDS)

Application: Structural Crack Repair, Waterproofing and Sealing

Service Life: Up to 20 Years (subject to correct application and substrate conditions)

Manufacturer: Logic Chemie

Website: logic-chemie.com