

Technical Data Sheet

LOGIC DP

Deep-Penetrating Epoxy System for Concrete Strengthening and Internal Reinforcement

Product Identification

Property	Description
Product Name	Logic DP
Product Type	Two-component epoxy-based penetration system
Application Method	Pouring / Surface Application
Intended Use	Deep impregnation and strengthening of concrete and cement-based screeds

Product Description

Logic DP is a two-component, epoxy-based penetration system designed for deep impregnation of mineral substrates such as concrete and cement screeds.

The product penetrates into the pore structure of the substrate due to its low viscosity and capillary activity, where it hardens and increases structural strength.

Unlike surface coatings, Logic DP does not form a thick layer but penetrates deeply and reinforces the internal structure of the material.

When combined with hydrophobic systems (e.g., Logic EX), it creates a sealed, water-resistant, and mechanically durable surface.

Areas of Application

- Concrete floors
- Cement-based screeds
- Industrial flooring systems
- Parking structures
- Warehouses and logistics centers
- Facades (with proper preparation)
- Interior and exterior mineral surfaces

Application Guidelines

Surface Preparation

The substrate must be:

- Clean
- Dry
- Free of dust, oils, grease, salts, and contaminants

Surface pores must be open to allow penetration.

Cleaning methods may include:

- High-pressure water cleaning (150–200 bar)
- Steam cleaning
- Mechanical cleaning (brushing / blasting)

Mixing

Logic DP is supplied as a two-component system:

- Component A: concrete impregnation solvent
- Component B: concrete impregnation hardener

Mixing Ratio: 1:1 (by volume or weight)

Both components must be thoroughly mixed before application.

Application

Application methods:

- Pouring and spreading
- Roller application
- Brush application
- Spray (low-pressure)

The product must be applied evenly across the surface.

Typical Application Rate

- Approx. 150 ml/m² per layer
- Total consumption depends on substrate

Multiple passes may be required for optimal penetration.

Product Properties

Property	Value
Appearance	Colorless liquid
Odor	Typical solvent odor
Density	approx. 0.9 (both components)
Viscosity	ca. 1 mPas
Solvent Content	0.9 g/ml
Mixing Ratio	1:1
Pot Life	24 hours <18 °C
Penetration Depth	approx. 150 µm
Chemical Resistance	High
Flammability	High

Consumption

Typical Values

- Minimum: approx. 150 ml/m²
- High-absorption substrates: up to 300–400 ml/m²

Consumption depends on:

- Porosity
- Surface condition
- Application method

On-site testing is recommended.

Curing and Hardening

Curing depends on:

- Temperature
- Ventilation
- Substrate conditions

Guidelines

- Minimum application temperature: ≥ 0 °C
- Optimal temperature: < 19 °C
- Initial curing: 24 hours
- Full curing: 5 days

Proper ventilation is required, especially in enclosed spaces.

Poor ventilation may lead to incomplete curing.

Performance Characteristics

- Deep penetration into concrete and screeds
- Significant increase in surface strength
- High resistance to abrasion and mechanical load
- Resistance to:
 - Water
 - Mineral oils
 - Solvents
 - Acids and alkalis
- Improves durability of substrate
- Prevents dust formation
- Enhances adhesion of subsequent coatings

Compatibility

Logic DP can be used with:

- Logic EX (hydrophobic systems)
- Epoxy coatings
- PU coatings
- Mineral coatings

Surface priming may be required depending on substrate.

Limitations

- Not suitable for wet or damp substrates
- Not applicable on non-porous surfaces
- Requires proper ventilation
- Limited pot life after mixing
- Must be used immediately after mixing
- Not suitable for applications requiring thick coating layers

Safety and Handling

Logic DP contains solvent-based components.

Use appropriate PPE:

- Protective gloves
- Safety goggles
- Respiratory protection (indoor use)

Keep away from ignition sources.

Do not smoke during application.

Refer to Safety Data Sheet (SDS) before use.

Storage and Shelf Life

- Store in original sealed containers
- Protect from frost and heat
- Storage temperature: <18 °C
- Shelf life: 24 months +

Transportation

Not classified as dangerous goods under normal conditions (check local regulations).

Environmental Information

- Contains solvent-based components
- Ensure proper ventilation during application
- Avoid release into environment

Legal Notice

The technical information provided is based on laboratory tests and practical experience.

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

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

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Application: Deep Concrete Impregnation and Structural Strengthening

Manufacturer: Logic Chemie

Website: www.logic-chemie.com