

# Technical Data Sheet

## LOGIC EX

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Hydrophobic Impregnation System for Mineral Structures & Infrastructure

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### Product Identification

Parameter	Description
Product Name	Logic EX
Product Type	Hydrophobic Impregnation System (Organic-based)
Application Method	Injection / Surface Application
Intended Use	Protection of mineral building materials against water absorption and moisture ingress

### Product Description

Logic EX is a pure organic hydrophobic impregnation system designed to reduce water absorption and prevent moisture ingress in mineral-based building materials.

The product penetrates deeply into the pore structure without blocking pores, allowing full vapor diffusion and maintaining breathability of the substrate.

The hydrophobic effect is achieved through a polymer-based system dissolved in a carrier medium. After application and evaporation, a thin molecular hydrophobic layer remains within the pore structure, acting as an internal water-repellent barrier. Logic EX does not form a surface film and does not alter the appearance of the treated surface.

### Areas of Application

- Facades (vertical surfaces)
- Masonry walls
- Concrete structures
- Brick and clinker surfaces
- Natural and calcareous stone
- Porous mineral substrates
- Protection against driving rain and water penetration
- Restoration and protection of historical buildings

## Application Guidelines

The substrate must be clean, dry, and free of dust, oils, grease, salts, and any substances that may impair penetration.

### Application Methods

- Low-pressure injection
- Surface flooding / saturation
- Spray application (with adjusted nozzle)

The product should be applied evenly to ensure deep penetration into the substrate.

### Recommended Application Conditions

- Surface must be dry prior to application
- Avoid application during rain
- Protect treated surfaces from water for at least 48 hours

For optimal performance, application may be carried out in multiple passes depending on substrate porosity.

## Product Properties

Property	Value
Appearance	Colorless liquid
Odor	Practically odorless
pH Value	Neutral (alkali-free)
Density	20 °C: 0,764 g/ml
Active Content	Paraffinic hydrocarbonats
Solvent Content	<0.1 g/l
Water Repellency	Hydrophobic
Penetration Depth	150-250pm
Film Formation	None (non-film-forming)
VOC Content	Low

## Consumption

Consumption depends on substrate porosity, absorption capacity, and application method.

### Typical Guideline Values

Substrate	Consumption
Brick / clinker	approx. 0.33 L/m <sup>2</sup>
Concrete	approx. 0.25 – 0.33 L/m <sup>2</sup>
Painted surfaces	approx. 0.15 – 0.33 L/m <sup>2</sup>

Exact consumption must be determined by on-site testing.

Overconsumption does not improve performance and should be avoided.

## Curing and Drying

Curing time depends on environmental conditions and substrate characteristics.

Parameter	Value
Application temperature	≥ 0 °C
Full effectiveness	Develops after drying phase
Water protection during curing	min. 48 hours
Temperature effect	Higher temperatures accelerate curingA

## Performance Characteristics

- Deep penetration into pore structure
- Maintains vapor permeability (breathable system)
- No pore blocking
- Long-term hydrophobic effect
- Does not alter surface appearance
- Reduces water absorption significantly
- Improves durability of mineral substrates

## Limitations

- Not suitable for wet or saturated substrates
- Not applicable on non-porous materials
- Not suitable for gypsum-based surfaces (in some cases)
- Application on frozen substrates is not permitted
- Salt-contaminated substrates must be pre-treated
- Painted surfaces must be tested for compatibility

## Compatibility

Logic EX can be used in combination with:

- Mineral-based paints
- Dispersion paints
- Plaster systems

Primer application may be required depending on substrate conditions.

## Safety and Handling

Logic EX is not classified as hazardous under normal use.

Standard PPE should be used:

- Protective gloves
- Safety goggles
- Protective clothing

Avoid contact with eyes and skin.

In case of contact, rinse immediately with clean water.

## Storage and Shelf Life

Parameter	Requirement
Storage	Store in original, sealed containers
Protection	Protect from frost and direct sunlight
Storage temperature	<20 °C
Shelf life	24 months

## Transportation

Logic EX is not classified as dangerous goods.

## Suitable Container Materials

- PE (polyethylene)
- PP (polypropylene)
- Stainless steel

## Environmental Information

- Solvent-free or low solvent system
- Does not release harmful substances after curing
- Environmentally compatible (depending on formulation)

## Legal Notice

The technical information provided in this data sheet is based on laboratory testing and practical experience.

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

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

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