# **Technical Datasheet**



# **ISOMAT-SILICONE**

# High quality silicone emulsion paint for exterior use

# Description

High quality new-generation emulsion paint, based on silicone and acrylic resins, for ISOMAT-SILICONE exterior use. characterized by extremely high water repellency, surface coverage and weather resistance. It is superior to any conventional acrylic paint, as it waterproofs the surface, protecting it from mold, while allowing maximum breathability. It is ideal for areas with high moisture and harsh weather conditions. It is also recommended for the restoration of historical or traditional buildings. It provides strong adhesion to any kind of old or new substrate like plaster, concrete, wood, etc. It has an excellent workability and dries quickly.

## Fields of application

ISOMAT-SILICONE is used for indoor or outdoor applications, on new or old surfaces, on substrates such as concrete, plaster, bricks, gypsum boards, asbestos-cement, wood, etc.

#### **Technical data**

Colors: white and selected colors

based on ISOMAT COLOR SYSTEM

Type: silicone emulsion paint

Density: 1,45 kg/l

Flash point: 98 °C.

Bond strength: 2,4 N/mm<sup>2</sup>

(EN 1542)

Viscosity (Poise): 16-18

pH: 8-9 at +23<sup>o</sup>C

(EN ISO 2884-2)

Volume solids: 39,1%. (EN ISO 2808).

Dry film thickness: 39,1 µm per layer (wet

film: 100 μm) (EN ISO 2808).

Solar Reflectance (SR): 88%

(ASTM E903-96)

Infrared Emittance: 0, 87

(ASTM C1371-04a)

Solar Reflectance Index (SRI): 111

(ASTM E1980-0).

Water vapor permeability:  $S_d = 0.13 \text{ m}$  (EN ISO 7783:2011  $V_1$  High,  $S_d < 0.14 \text{ m}$ ).

Capillary water absorption:  $0.03 \text{ kg/m}^2 \cdot \text{h}^{0.5}$ (EN ISO 1062- 3:  $W_3 \text{ low}$ , w < 0,1 kg/m<sup>2</sup>h<sup>0.5</sup>)

 $CO_2$  permeability: Sd = 165 m (EN 1062-6 requirement: Sd>50m).

Artificial weathering: Pass (no blistering, cracking or flaking)

(EN 1062-11after 2000h).

Temperature

resistance: from -15°C to +80°C

Minimum application

temperature: +5°C

Reaction to fire: Euroclass F

(EN 13501-1).

Opacity: min 97%

Whiteness: min 85%

Gloss level: 17 Satin (EN ISO 2813: < 60 at 60°)

Drying time: 1 h (in touch)

(EN ISO 9117).



# ISOMAT-SILICONE

Recoat time: 16 h (EN ISO 9117)

# Cleaning of tools:

Remove as much paint as possible from the used tools before cleaning. Clean the tools thoroughly with water and detergent, immediately after use.

### **Directions for use**

#### 1. Substrate preparation

The substrate should be dry and free of grease, loose particles, dust, etc.

- Cracks or joints are filled with ISOMASTIC-A acrylic sealant.
- Any imperfections on concrete should be patched with DUROCRET polymermodified mortar and on exposed concrete, with PLANFIX or PLANFIX-FINE polymermodified putties.
- Plastered wall may be patched with UNICRET and UNICRET-FAST premixed mortars.

The substrate is then primed with the siliconeacrylic, micronized, water-based primer PRIMER ACRYL, thinned up to 50% with clean water or with acrylic solvent primer PRIMER ACRYL-S, thinned up to 100% with SM-18 of ISOMAT or with WHITE SPIRIT. These primers are also ideal to use for the stabilization of the surface, when the primer is loose or crumbly.

## 2. Application

Before use, stir the content lightly and apply it as it is or thinned 5-10% with clean water. Two coats of ISOMAT-SILICONE are applied with a roller, brush or airless gun. The second coat is applied after the first coat has completely dried. Temperature during application and drying of the paint should be among +10°C and +35°C.

# Coverage

ISOMAT-SILICONE covers 10- 12 m<sup>2</sup>/l per coat, on previously prepared surfaces.

#### **Packaging**

ISOMAT-SILICONE is available in 3 I and 10 I containers.

# **Shelf-life - Storage**

24 months from production date, if stored in original, unopened packaging, at temperatures between +5°C and +35°C. Protect from direct sun exposure and frost.

## **Volatile Organic Compounds (VOCs)**

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory c, type WB is 40 g/l (2010) for the ready-to-use product.

The ready-to-use product ISOMAT-SILICONE contains a maximum of 3 gr/l VOC.







#### 2032

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DoP No.: ISOMAT SILICONE / 1424-03

EN 1504-2

Surface protection products

Coating

Permeability to CO<sub>2</sub>: Sd > 50m

Water vapor permeability: Class I (permeable)

Capillary absorption: w < 0.1 kg/m<sup>2</sup>·h<sup>0.5</sup>

Adhesion: ≥ 1.0 N/mm<sup>2</sup>

Artificial weathering: Passes

Dangerous substances comply with 5.3

Reaction to fire: F

ISOMAT S.A.

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