704/705 Multi-Stone

GENERAL PRODUCT DESCRIPTION

Multi-Stone 704 (glossy) and **705** (matte) are high-quality inorganic-organic hybrid coatings for mineral surfaces. Both variants are based on a 100% solids formulation with a SiO^2 base and are characterized by outstanding durability, stain resistance, anti-graffiti properties, and high resistance to weathering and temperature.

These are visible coatings that enhance the colour of treated surfaces. Variant 704 produces a high-gloss finish, while 705 offers a matte look. The coatings are partially vapor-permeable and UV-resistant.

Application Areas

- Natural stone (marble, granite, sandstone, etc.)
- Concrete, cement, screed, terracotta
- Wall surfaces (including vertical applications)
- Masonry, roof tiles, paving stones
- Pools or surfaces with occasional water contact (e.g., fountains, dipping basins)
- Wood (for indoor applications)

PROPERTIES

- Water and oil repellence: Very good
- Anti-graffiti: Yes (complete coating required)
- Acid/alkali resistance: Resistant to citric acid, vinegar, NaOH, cleaning agents (see lab tests)
- Abrasion resistance: High (tested with microfiber cloth and sandpaper)
- Weather resistance: UV-stable, frost-/de-icing salt resistant
- Heat resistance: Up to >1,000 °C on mineral substrates

PRODUCT SPECIFICATIONS & CHEMICAL PROPERTIES

Property	Value
Base	Inorganic-organic hybrid formulation (SiO^2)
Active content	~100 % by weight
VOC content	Solvent-based, not water-soluble; dilutable with IPA, ethanol or PMA
Flash point	>60 °C
Layer thickness	Approx. 10-100 µm (depending on application and dilution)
Density	approx. 1,0 g/cm³
pH value	Not applicable (not water-soluble)
Odor	solvent-like, volatile

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Colour	Transparent glossy (704) / Transparent matte (705)
Consumption	10-50 ml/m² (depending on substrate and application) = up to 100 m² per litre
Temperature resistance	>1,000 °C (short term, on stone)
Shelf life (liquid)	Minimum 12 months
Storage	5-25 °C, protect from sunlight and frost
Durability of coating	>5 years

PFAS INFORMATION

704/705 contains no PFOA or PFOS.

Fluorinated additives are present below the legal limits according to EU Regulation 2024/2462.
They are used exclusively to enhance dirt repellence.

APPLICATION & PROCESSING

General

- Thoroughly clean and degrease the surface, then allow it to dry completely
- Application temperature: 15–30 °C, relative humidity: 50–80 %
- Avoid direct sunlight during application
- Clean and degrease the surface using, for example, isopropanol (≥ 70 %)**,** ethyl acetate, or test benzine

Application by Wiping (Roller, Brush, Spray Method)

- If necessary, apply the first layer diluted up to 50 % with IPA (as a primer)
- Apply an undiluted layer after approx. 20–30 minutes
- 2–3 layers are recommended, depending on the porosity of the substrate
- If needed, the gloss level can be adjusted after curing using fine abrasive fleece
- For submerged applications (e.g. in water basins): at least 3 layers are required
- Apply a few drops (approx. 5–10 ml/m²) to a clean, lint-free microfiber cloth

Drying & Curing

- Dust-dry after a few minutes, walkable after 12 hours
- Fully chemically resistant after 24 hours

Important Notes:
Not suitable for high-gloss polished surfaces without prior matting (use 60–80 grit sandpaper).
Equipment can be cleaned with IPA or ethanol.

CLEANING & CARE

Aggressive cleaners are no longer necessary. Surfaces can be cleaned easily with a mild detergent (e.g. CCM's bio-cleaner Biosativa®).
Do not use abrasive sponges. Regular maintenance extends the coating's lifespan.

QUALITY STANDARDS – TESTS

- Acid/Cleaner Test: No visible damage after exposure to 9 chemicals including NaOH, HNO_3, and cleaners (Resinar Lab São Paulo)
- Hydrophobization & Contact Angle: Significantly increased contact angles (up to 116°) compared to untreated samples (Marble test CCM)
- Abrasion Resistance: Gloss reduction under heavy abrasion, protective function remains intact
- Flammability Certification: Tested according to EN ISO 1716 – non-combustible

PACKAGING UNITS & VARIANTS

- 1.000 ml bottle (704-1)
- 5.000 ml canister (704-5)
- 30 Liter canister (704-30)

SAFETY & TRANSPORT

- Hazardous Material: UN 1993, Class 3, Packing Group III
- Hazard Statements: H226, H319, H336
- Personal protective equipment required (gloves, safety goggles, respiratory protection when spraying)
- Storage: tightly sealed, dry, cool (5–25 °C)

HS Code 3208 9091

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