

100% ECO FRIENDLY FIRE GARD EPOXY COATING

DESCRIPTION

MAGIECHEM 94VO is a fire retardant epoxy BINDER that does not emit toxic fumes in the event of a fire.

MAGIECHEM 94VO is a two component 100% solid epoxy based self-leveling coating.

MAGIECHEM 94VO dries to a very hard finish, providing a seamless ceramic-tile finish that maintains good impact resistance and in-ternal flexibility, while increasing its resistance to fire.

MAGIECHEM 94VO is designed for interior use in places at risk to fire such as maintenance Dept, Welding workshops, Aeronautical facilities, Senior residences and others.

MAGIECHEM 94VO could be used alone or with quartz aggregates to provide a strong protective coating finish.

ADVANTAGES

- Meets the UL 94 VO norms
- Meets LEED requirement
- Excellent fire resistance
- Self-extinguishing coating
- Excellent mechanical properties
- Excellent abrasion resistance

INSTALLATION INSTRUCTIONS

The surface must be dry and free of contaminants such as oil, grease, wax, etc...

Concrete: Mechanical or chemical preparation (Acid wash / neutralization). Depending on the restrictions.

Metal: Sandblasting CSP 3 minimum.

Wood: Sand and clean.

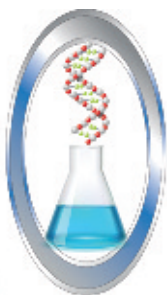
PRECAUTIONS

- Consult MSDS before usage;
- Do not apply if the substrate temperature is below 5°C / 41°F;
- Wait at least 5 min before back-rolling;
- Ensure good ventilation;
- Roll by block areas as large as possible in order to minimize the variation of color at the junction of the adjacent sections.

APPLICATION

Recommended primer : **MAGIECHEM 5076** where the % moisture in the concrete is between yellow and green, use a Delmhorst (Scales measurement) or 3.5% and 5% at the rate of 240-280ft²/U.S. gal (6-8 mils DFT).

Or **MAGIECHEM 94VO** (where the concrete is dry), apply a stretch coat at the rate of 6-8 dry mils (240-280ft²/U.S. gal) followed by **MAGIECHEM 94VO** selected finish:



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Smooth floor coating without aggregates : Apply two (2) coats of **MAGIECHEM 94VO** at 15 to 20 mils = 4m²/l (about 80 to 100ft²/U.S. gal) per coat, on a primed surface; spread evenly with a notched squeegee and back-roll with a high quality roller (5 or 6 mm lint free roller).

Smooth floor coating with aggregates : Mix 4 parts A to 1 part B (4A:1B by volume), then add 5 parts (30-70mesh) of dry aggregates at desired flow. Spread the mixture with 1/4" notched squeegee at the rate of 60ft²/U.S. gal) and back-roll with a short nap roller.



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Broadcast system: Mix 4 parts A and 1 part B (4A:1B by volume). Then the spread **MAGIECHEM 94VO** on the primed surface at the rate of 80ft²/U.S.gal, with a notched squeegee and back-roll with a high quality roller. Then broadcast the 30 mesh (select silica sand) aggregates until saturation. Allow to cure overnight, remove excess aggregates and apply two coats of 10 mils each.

Troweled system (1/4"thick): Mix A&B separately and then mix 4 parts of A to 1 part B (4:1 by V/V) and add 6 to 8 kilos 24 mesh Quartz aggregates (colored or not) per liter. Spread with trowel at 1/4". Then grout with two (2) coats of resin (mix of A & B) at 10 mils per coat.

QUALIFICATION AND QUANTIFICATION

Color:	MagieChem color chart	Solvent cleaner:	MAGIECHEM 211
V.O.C.:	≤ 10 g/l (≤0.08 lb /gal. US)	Packaging:	18.9L/(5 gallons US)
Mix:	4 parts A and 1 part B in volume	Recommended Thickness:	
Pot Life:	20 minutes for a mass 0.5 kg (1.1lbs)	Coating:	400 microns (15mils)/coat
Drying time:		Broadcast:	1/8" (3mm) 55 sq.ft./gal
Dry to Touch:	6 to 10 hours	Trowel:	1/4" (6 mm) 25 sq.ft./gal
Recoat:	16 to 48 hours		
Light traffic:	24 hours		
Complete:	7 Days		
Shelf Life:	1 year in the original unopened container		
Dilute if necessary:	MAGIECHEM 211 up to 5% max. (50ml/l or 6.4oz/gallon US)		

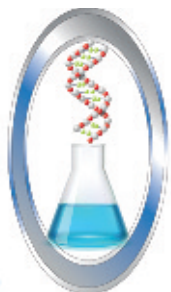
PHYSICAL PROPERTIES WITHOUT AGGREGATS

Compressive strength	ASTM D695 = 113 MPa (16385 psi)
Flexural strength	ASTM D790 = 42.7 MPa (61 625.5 psi)
Tensile strength	ASTM D638 = 23.3 MPa (3 378.5psi)
% Elongation	ASTM D638 = 5.8%
Adhesion to concrete	ASTM D4541 ≥ 3.5MPa with damage on concrete
Hardness Shore D	ASTM D2240 = 75-85
Calculated VOC	ASTM D2396 = 0.5 g/L

TECHNICAL SERVICES AND WARRANTY

For assistance, consult a representative of **MAGIECHEM Inc.**

The information contained in this data sheet is based on trials that we believe valid. However, when using the conditions of application are beyond our control, the seller and / or the manufacturer disclaim any responsibility except to replace the product proves defective.



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SURFACE/GALLON					
Thickness (mils)	1	4	8	10	20
Sq.ft./gallon	1600	400	200	160	80

