

### ANTI SPARK CONDUCTIVE EPOXY COATING

#### DESCRIPTION

**MAGIECHEM 500C ESD** is a two component high solid, smooth high gloss finish conductive epoxy coating, when it is installed at the rate thickness. With the proper preparation on the rate base coat.

**MAGIECHEM 500C ESD** has an excellent resistance reading in the conductive range of  $2.5 \times 10^4$  --  $1.0 \times 10^6 \Omega$  (Ohms) and a good chemical resistant. For extremely high chemical resistance ask for Novalac version.

**MAGIECHEM 500C ESD** has a consistent resistance measurement when tested at 10 to 500 Volts with a Megohmmeter according to NORME ANSI S20.20/ANSI 97.1 and ASTM F150.

#### AVANTAGES

- Easy mixing ratio 2A : 1B by volume
- Maintains electrical conductivity by volume
- Maintains electrical conductivity over the wear life
- Excellent adhesion and abrasion
- Easy to maintain, smooth surface
- Prevents explosion and fire with eliminating all electrical surface charge when well grounded.
- Meets LEED requirement

#### APPLICATION INSTRUCTIONS

The surface must be free of all contaminants such as grease, oil, dust, dirt, glue, tire marks and other contaminants.

**Concrete:** must be aged for 28 days minimum before preparation and application, all irregularities should be fixed and cleaned before the application of the primer, consult MAGIECHEM for more clarification.

#### APPLICATION

Mix the material before use

- **MAGIECHEM 500 ESD** should be installed over a primed surface with MAGIECHEM 5076 as flow:
  - a) 8 mils of **MGC5076** diluted with a maximum of 5% with xylene or IPA filled with a fine silica sand (100 mesh or higher) to achieve a uniform and sealed surface.
  - b) 10 to 12 mils of **MGC400C** pigmented .
  - c) Install the grounding connection electrodes when **MGC400C** dries, use copper tape as close as possible to the steel columns and wall edges, to provide permanent protection by preventing traffic damage.
  - d) Install the second coat of **MGC400C** at 10 mils to cap all the connection for grounding.
  - e) Install a stretch coat of **MGC500C ESD** with a notch squeegee at 15 mils dry film thickness (**MGC500C ESD** could be diluted at 5% with xylene).



**MAGIECHEM**



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## FICHE DESCRIPTIVE

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#### CAUTION

- Consult MSDS before use
- Can be applied down to 13 °C (55.5°F).
- Substrate temperature must be 3°C (5°F) above measured dew point.
- Surface moisture content by using an impedance moisture meter (Tramex) designed for use on concrete as detailed in ASTM E1907.
- Acceptable test results shall be less than 4% by mass. If above this value, consult a MAGIECHEM Rep.
- For best performance, keep the ESD floor clean from all contaminants, presence of silicone release agents, spray lubricants, paints, lacquers etc.
- Freshly applied **MAGIECHEM 500C ESD** should be protected from dampness, condensation and water for at least 24 hours immediately following application.
- Do not run a conductive measuring test before full cure of **MAGIECHEM500C ESD**

#### TECHNICAL INFORMATION

**Colour:** Off White or Grey

**V.O.C.:** ≤ 0 g/l as is and ≤ 99 gr/liters when diluted with 5% of xylene.

**Mixing ratio:** 2 parts A and 1 part B by volume

**Pot Life:** 30 minutes for 0.5 kg (1.1lbs)

**Induction time:** N/A

**Diluent:** up to 5 % with Xylene for the first coat.

**Recommended Thickness:** 15 mils on total of ESD material.

**Coverage:** 80 to 90 ft<sup>2</sup>/US gal.

**Recoat:** 12 to 24 hours with the same material, depends on the temperature and % of te RH

**Foot traffic :** 16 to 24 hours at 22°C , could higher then that if temperature is less then 20°C

**Complete cure:** 7 days

**Solvent Cleaner:** Acetone or Hyroxyl of methyl

**Shelf Life:** 1 year in original unopened container

**Packaging:** 11.34 L or 56.7L (1 or 15 US gal.)

#### TECHNICAL SERVICES AND WARRANTY:

For assistance, consult a representative of MAGIECHEM products. The information contained in this data sheet is based on trials that we believe valid. However, when using the conditions depending on the application of our control. The seller and/ or the manufacturer disclaim any responsibility except to replace the product when proven defective.



**MAGIECHEM**

	SURFACE/GALLON				
Thickness (mils)	1	4	8	10	20
SF /Gallon	1600	400	200	160	80