MAGIECHEM 400 ESD

DESCRIPTION

CONDUCTIVE UNDERCOAT EPOXY & SWNTF NANOTUBE

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MAGIECHEM 400 ESD is a two component high solid conductive epoxy primer based on single wall nano tube of carbon black.

MAGIECHM 400 ESD has an excellent resistance reading in the conductive range of 2.5×10^4 -- 1.0×10^6 Ω (Ohms) when install at the right thickness.

MAGIECHM 400 ESD is used as a under coat for MAGIECHEM ESD floor coating to insure the consistance discharge amoung the time according to ASTM Method F150.

MAGIECHEM 400 ESD has a consistent resistance measurement when tested at 10 to 500 Volts with a Megohmeter according to NORME ANSI S20.20/ANSI 97.1 and ASTM F150.

ADVANTAGES

- 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 400 ESD should be installed over a primed surface with MAGIECHEM 5076 as flow:

a) 6 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 **MGC400** pigmented as a under coat conductive primer.
c) Install the grounding connection electrodes when **MGC400** dries, use copper tape as close as possible to the steel columns and wall edges, to provide permanent protection by preventing traffic damage
d) Check the conductivity reading, if is not in the range of $2.5x10^4$--$1.0x10^6$ Ω install a second coat at 6 mils DFT.

e) **Install MAGIECHEM ESD PRODUCTS according to the engineers specified requirements. Then apply ESD according to the specifications on the technical data sheets.**

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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 then 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 400 ESD** should be protected from dampness, condensation and water for at least 24 hours immediately following application.

TECHNICAL INFORMATION

Colour: black
V.O.C.: ≤ 0 g/l as is, and less ≤ 99 gr/liters if 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: 12 mils on total of ESD material.
Coverage: 120 to 160 ft²/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.

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

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