

# Conductive Compounds for ESD (ElectroStatic Discharge) Protection

## ESDite - M

### What is ESD?

ESD stands for ElectroStatic Discharge. It is the spark you feel when your finger comes close to a door knob after you're walked across a carpet on a dry day. Similar but unfelt ESD events occur at every touch. Below 3,000 volts of static discharge a human will feel nothing, but a for the final curtain to fall on its expected performance

Electrostatic discharge is considered as a serious industrial problem that causes explosion of powder and chemical factory, inferior products of electronic systems and semiconductor factory, malfunction on micro machines of hospital and communication systems, etc., ESDite is highly durable inorganic electrostatic dissipative system, developed to dissipate electrostatic charge effectively so that architectures can dissipate electrostatic charge semi-permanently to protect human body and industrial facilities.

### Features

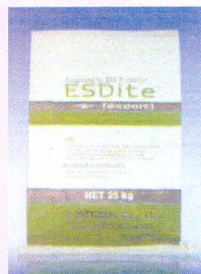
- **Stable electric conductivity**
  - It suffices strict military requirement by the surface resistance of  $2.5 \times 10^4 \sim 1.0 \times 10^6 \Omega$  (ESD-S.7.1, ASTM F 150).
  - Stable and excellent in electrostatic dissipation.
- **High Strength and high durability**
  - Strong against abrasion, and no crack on impact.
  - Semi-permanent product requiring no maintenance.
- **Cramic binder system**
  - Nonflammable and nontoxic

### Usage

- Plants or storage which deal with explosive/volatile matters.(Explosive plants, chemical plants, LNG/LPG storages, military facilities etc.
- Facilities that need the prevention of machinery failure due to the electrostatic discharge.
- Intelligent buildings, hospital, operation room.

### Composition

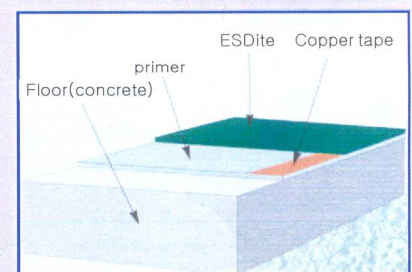
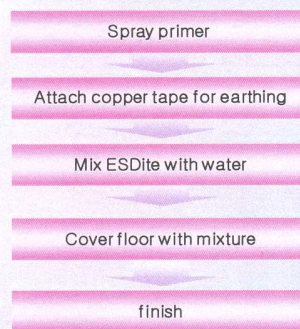
- Main component : Hydraulic inorganic powder
- Appearance : Pre-mix compound
- Color : Green, Red, Yellow, Gray
- Packing : 25kg bag



### Properties

Items		data	test method
electrical resistance	Surface-surface	$2.5 \times 10^4 \sim 1.0 \times 10^6 \Omega$	ESD-S.7.1(100V)
	Surface-earth	$2.5 \times 10^4 \sim 1.0 \times 10^6 \Omega$	
	Surface-surface	$2.5 \times 10^4 \sim 1.0 \times 10^6 \Omega$	ASTM F 150(500V)
	Surface-earth	$2.5 \times 10^4 \sim 1.0 \times 10^6 \Omega$	
Compressive strength (7 days)		Min. 300kgf/cm <sup>2</sup>	JIS R 5201
Flexural strength (7 days)		Min. 40kgf/cm <sup>2</sup>	JIS R 5201
Abrasion resistance		Max. 0.1 mg/mm <sup>2</sup>	KS F 2813
Mechanical shock resistance		Non crack & spoil	KS F 2221
Fire resistance		Non flammable	-
Chemical resistance		Min. 90% (good)	KS L 5105

### Installing method



**INE-Value Creators & Consultants (P) Ltd.**

Plot No. A-12, Vikramपुरi, Secunderabad- 500 009.  
Ph: 040-2784431/33, Fax: 040-2784432,

E-mail: [info@inev.in](mailto:info@inev.in)

Web site: [www.inev.in](http://www.inev.in)

