

# EMI Shielding Paint

The invention is the preparation of an electromagnetic interference (EMI) shielding paint. When coated on the interior and exterior surfaces of non-metallic small articles or large installation enclosures, it provides EMI protection. The paint developed is environmentally friendly, chemically stable, light weight and good corrosion resistance.

## Technology Features & Specifications

- Lighter and has better corrosion resistance than metallic filler based shielding coatings.
- Does not require tailored injection moulding process to produce shielding casing and housing unlike when preparing conductive plastics.
- Simple to apply under ambient condition and does not require temperature and pressure control and UV radiation.
- Can be conveniently applied to surfaces of any shape by brushing or rolling at ambient conditions.
- Has a wide working frequency range for EMI shielding from 15M to 20G Hz and above.

## Customer Benefits

The EMI shielding paint developed has a high potential for application to electrical & electronic facilities, hospitals, transportation system, telecommunication system and buildings. This coating can be easily applied on to the internal and external surfaces of articles and installations to protect electrical, electronic & IT products, medical devices, telecommunication systems, aerospace and electric trains from Electromagnetic interference. EMI is an unwanted disturbance caused by electromagnetic conduction and radiation emitted from electronic equipment. EMI may also cause adverse health effects to human. Many diseases have correlated positively with a high exposure to electromagnetic fields. International directives and global technical standards have been issued to enforce the regulation of EMI emission. An increasing number of countries have enacted strict EMI control measures in telecommunication, medical, and transportation equipment. All electrical and electronic products and systems are now required to comply with the EMC and EMI standards. There is a high demand for its use as a result of the regulatory requirements.

### *Benefits*

- High EMI shielding efficiency
- Lighter and better corrosion resistance
- No need for tailored injection molding process.
- Simple to apply under ambient condition
- Wide working frequency range for EMI shielding from 15M to 20G Hz and above

### *Potential Application*

- This technology has high potential for application to electrical & electronic facilities, hospitals, transportation system, telecommunication system and buildings.

### *Commercialisation Opportunities*

- ✓ Ready for commercialization
- ✓ Available for licensing
- ✓ Accepting business plans from interested parties

### *Contact Us*

Department for Technology, Innovation and Enterprise (TIE)  
Singapore Polytechnic  
500 Dover Road  
Singapore 139651

Email: [tie@sp.edu.sg](mailto:tie@sp.edu.sg)

## Disclaimer

Although due care and attention have been taken to ensure that the preparation of this material is as accurate as possible, the contents of this brochure are provided for information purposes only. Neither the Singapore Polytechnic nor the inventors offer any warranty, written express or implied, as to the accuracy of the said contents. Applicants are advised to undertake independent evaluation of the technology.