

Markets for ESD and Antistatic Protection Materials in Electronics

<https://marketpublishers.com/r/MF18CA49ED1EN.html>

Date: March 2012

Pages: 115

Price: US\$ 1,995.00 (Single User License)

ID: MF18CA49ED1EN

Abstracts

Summary

NanoMarkets sees important new opportunities emerging in 2012-2013 for suppliers of ESD and antistatic protection materials. Factors that are influencing the markets for ESD protection materials include:

A shift is just beginning to occur in the display market that pits the currently-dominant LCD technology against newer technologies like OLEDs, which may have very different needs for ESD protection;

There continues to be growing demand for ESD products that is driven by the onward march of Moore's Law, which makes errant charges ever-more harmful in electronics manufacturing and assembly as feature sizes decrease; and

The trend toward pervasive electronics is expected to increase the size of the addressable market for ESD products.

NanoMarkets believes that these trends will have positive implications for the ESD materials business over the next several years, in electronics manufacturing, assembly, and packaging.

Fortunately, these emerging patterns of demand for ESD products are occurring at a time when there are also new developments in materials, many of are related to the rise of nanomaterials. NanoMarkets is predicting, for example, that nanometals, graphene and carbon nanotubes will begin to account for a sizeable part of the ESD materials market in the not-too-distant future. It also believes that inherently conductive polymers

will continue to make inroads into the larger ESD market, displacing currently used inexpensive – and often impermanent – materials.

In this dynamic environment, it is essential for manufacturers of ESD protection materials to identify both the “where” and “how much” for the available opportunities. NanoMarkets has been providing analytical coverage of materials used in the electronics markets for many years, and has developed an insider’s knowledge of the ESD markets and the factors that shape it. As with all NanoMarkets reports, this report includes a detailed eight-year forecast of ESD materials markets by application and material, and it also contains a discussion of some of the key suppliers and their product/market strategies.

Contents

EXECUTIVE SUMMARY

E.1 What Has Changed Since Our Last Report

E.1.1 Changes in Coverage and Forecasting Assumptions

E.1.2 A Little More Confidence in the Market: Technical and Economic Reasons

E.2 Key Drivers Creating Opportunities for Suppliers of ESD Protection Products

E.2.2 Pervasive Electronics

E.2.2 Shrinking Circuitry

E.3 Opportunities for ESD Materials and Products

E.3.1 Opportunities for Conventional ESD Materials

E.3.2 Emerging Opportunities for New ESD Materials

E.3.3 Emerging Trends in Transparent ESD Coatings

E.3.4 ESD Product Opportunities

E.3.5 Alternative Scenarios

E.4 Firms to Watch

E.5 Summary of Eight-Year Forecasts of ESD Products

CHAPTER ONE: INTRODUCTION AND BACKGROUND

1.1 Background to this Report

1.1.1 ESD Applications and Products

1.1.2 ESD Materials

1.2 Objectives and Scope of this Report

1.3 Methodology of this Report

1.4 Plan of this Report

CHAPTER TWO: MATERIALS AND MARKETS FOR ESD AND ANTISTATIC PROTECTION

2.1 Emerging Trends in Materials for ESD and Antistatic Protection

2.1.1 Definitions and Classifications

2.1.2 Metals and Metal Oxides

2.1.3 Carbon and Carbon Nanomaterials

2.1.4 Inherently Conductive Polymers

2.1.5 Other Organic Materials

2.2 Current and Future Opportunities for ESD in Electronics Manufacturing and Assembly

- 2.2.1 Miniaturization and Ubiquitous Electronics
- 2.2.2 Protecting the Investment in Cleanrooms and Fabs
- 2.3 Current and Future Opportunities for Protection of ESD-Sensitive Devices
 - 2.3.1 Packaging, Shipping, Transport, and Storage
 - 2.3.2 ESD Textiles and Furniture
 - 2.3.3 ESD Mats and Flooring
- 2.4 Current and Future Opportunities for Transparent ESD Coatings
 - 2.4.1 Films and Packaging – Flexible Transparent Coatings
 - 2.4.2 Antistatic Films in the Display Industry
 - 2.4.3 Rigid, Transparent ESD Coatings
- 2.5 Key Points Made in this Chapter

CHAPTER THREE: EIGHT-YEAR FORECAST OF THE ELECTROSTATIC DISCHARGE PROTECTION MARKET

- 3.1 Forecasting Methodology and Assumptions
 - 3.1.1 Data Sources
 - 3.1.2 Scope of the Forecast
 - 3.1.3 Alternative Scenarios
- 3.2 Forecast of ESD Basic Materials
 - 3.2.1 Metals and Metal Compounds
 - 3.2.2 Carbon and Carbon Nanomaterials
 - 3.2.3 Organic Materials and Polymers
 - 3.2.4 Summary of Basic ESD Materials
- 3.3 Forecasts of ESD Products by Application
 - 3.3.1 ESD in Semiconductor and Electronics Manufacturing, Assembly, and Mission Critical Settings
 - 3.3.2 Personal Grounding and ESD Textiles
 - 3.3.3 ESD Floors, Work Surfaces, and Furniture
 - 3.3.4 Transparent ESD Coatings in Displays and Electronics
- 3.4 Forecast of ESD Products by ESD Basic Material Type
- 3.5 Summaries of Forecasts of ESD Products
 - 3.5.1 Summary of ESD Products by ESD Material Type
 - 3.5.2 Summary of ESD Products by Application

ACRONYMS AND ABBREVIATIONS USED IN THIS REPORT

ABOUT THE AUTHOR

LIST OF EXHIBITS

- Exhibit E-1 Summary of ESD Products by Application, 2012-2019 (\$ Millions)
- Exhibit E-2: Summary of (Value-Added) ESD Products by ESD Material Type 2012-2019 (\$ Millions)
- Exhibit 2-1: Overview of Common Metal Oxides Used in Transparent ESD Coatings
- Exhibit 2-2: Overview of Selected CNT Material Firms
- Exhibit 2-3: Comparison of Agfa and Heraeus PEDOT-Based Materials
- Exhibit 2-4: Overview of Enthone Ormecon (and related) PANI Products
- Exhibit 2-5: Overview of Selected Tin-Oxide ESD Coating Products from SciCron Technologies
- Exhibit 3-1: Forecasts for ESD Basic Materials: Metals and Metal Compounds, 2012-2019 (\$ Millions)
- Exhibit 3-2: Forecasts for ESD Basic Materials: Carbon and Carbon Nanomaterials, 2012-2019
- Exhibit 3-3: Forecasts for ESD Basic Materials: Organic Materials, 2012-2019 (\$ Millions)
- Exhibit 3-4: Summary of ESD Basic Materials, 2012-2019 (\$ Millions)
- Exhibit 3-5: Forecasts for ESD Products Used in Semiconductor and Electronics Manufacturing, Assembly and Mission-Critical Settings by Application, 2012-2019
- Exhibit 3-6: Forecasts for ESD Products Used in Semiconductor and Electronics Manufacturing, Assembly and Mission-Critical Settings by Sector 2012-2019
- Exhibit 3-7: Forecasts for ESD Products Used in Semiconductor and Electronics Manufacturing, Assembly and Mission-Critical Settings by Material 2012-2019
- Exhibit 3-8: Forecasts for ESD Packaging Products by Type of Packaging 2012-2019
- Exhibit 3-9: Forecasts for Personal Grounding Devices, 2012-2019
- Exhibit 3-10: Forecasts for ESD Clothing, 2012-2019
- Exhibit 3-11: Forecasts ESD Flooring, 2012-2019
- Exhibit 3-12: Forecasts for ESD Floor and Work Surface Mats 2012-2019
- Exhibit 3-13: Forecasts for ESD Furniture, 2012-2019
- Exhibit 3-14: Forecasts for Transparent ESD Coatings in Displays and Electronics, 2012-2019
- Exhibit 3-15: Forecasts for Value-Added ESD Products Based on Metals and Metal Compounds, 2012-2019 (\$ Millions)
- Exhibit 3-16: Forecasts for Value-Added ESD Products Based on Carbon and Carbon Nanomaterials, 2012-2019 (\$ Millions)
- Exhibit 3-17: Forecasts for Value-Added ESD Products Based on Organic Materials, 2012-2019 (\$ Millions)
- Exhibit 3-18: Summary of (Value-Added) ESD Products by Application, 2012-2019 (\$

Millions)

Exhibit 3-19: Summary of (Value-Added) ESD Products by ESD Material Type
2012-2019 (\$ Millions)

I would like to order

Product name: Markets for ESD and Antistatic Protection Materials in Electronics

Product link: <https://marketpublishers.com/r/MF18CA49ED1EN.html>

Price: US\$ 1,995.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/MF18CA49ED1EN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970