

We are



Hello,

September 2021

Process Safety Dispatch

In this Issue

- **Static Electricity Safety: Making sense of volume resistivity, surface resistivity and charge decay time**
- **Combustible Dust - Ten (10) NFPA Codes & Standards**
- **Free On Demand Webinars**



Static Electricity Safety: Making Sense of Volume Resistivity, Surface Resistivity and Charge Decay Time

Do your eyes glaze over at the sight of 'specifications' when trying to purchase 'static dissipative' or 'conductive' packaging, hoses/pipes, filter bags, and equipment? All those huge numbers with odd units of measurement. What is the difference between "volume" and "surface resistivity"? What is an "ohm.m" or an "ohm per square"? And how do we know what equipment is "static-safe" when we read the equipment specifications?

In this issue of Process Safety Dispatch, we address these and other questions relating to the selection of equipment (liners, hoses, drums, connectors....) designed to help control static electricity and which can be safely used in Class I and Class II flammable atmospheres. But before we do, let's consider why we are interested in these parameters.

If we are assessing the possible hazards from static electricity, all we really need to know is if there can be any hazardous build-up of static electricity on our plant, people, equipment, and processed materials. If there is no static accumulation on anything then there is no risk of static discharge/spark to cause ignition, fire, or explosion. Simple? Unfortunately, whenever there is movement that involves contact and separation of any surfaces, charge **WILL ALWAYS** be generated. What is less certain is whether that charge will build-up or simply conduct away safely to ground/earth. Enter **volume resistivity, surface resistivity and charge decay (relaxation) time!**

[Read More](#)



Expert Consulting

- Dust Explosion Prevention & Mitigation
- Control of Static Electricity
- Hazardous (Electrical) Area Classification
- Process Hazard Analysis
- Process Safety Management
- Fire and Explosion Hazard Assessment
- Incident Investigation
- Organizational Process Safety Competency Assessment

Specialist Laboratory Testing

- Combustible Dust Testing
- Electrostatic Testing
- Self-Heating / Thermal Instability Testing
- Flammability Testing of Gases & Vapors



Combustible Dust - **Ten (10)** NFPA Codes & Standards



So, you thought you knew what you needed to do to comply with the requirements of NFPA 652 Standard on the Fundamentals of Combustible Dust. But did you know that there are at least a further 9 standards produced by NFPA regarding Combustible Dusts which could be relevant to you? And that's before we get onto the numerous other process safety codes and standards that may be applicable but of a more general nature. Read on to find out more. Read on to ensure you comply with the most appropriate Combustible Dust codes and standards for your industry and nature of your powder(s)!

[Read More](#)

If you would like a quote for any of our testing and/or consulting services, please click on the button below. We will get back to you promptly with your proposal.

[REQUEST A QUOTE](#)

Free On Demand Webinars

Combustible Dust Hazards: Assessment, Prevention and Protection Including the Requirements of NFPA 652 [\[watch\]](#)

Electrostatic Hazards in Processing Industry: The Nature of the Problem and Practical Measures for its Control [\[watch\]](#)

Fire and Explosion Hazards: How to Identify and Control Them in Your Process [\[watch\]](#)

If you received this newsletter from a colleague and would like to sign up to receive our newsletters in the future -- Sign up [Here](#).