We are Stonehouse process safety

Hello,

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Process Safety Dispatch

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Why I have not had my powders tested to determine their Explosion and Fire Properties

There are still facilities handling and processing dusty powders that are operating with no knowledge of the fire, explosion, or thermal stability properties of the materials they process. Why?

One thing is clear. There are a number of well-established, national and international standards applicable to the control of fire and explosion hazards in handling combustible dusts. In the USA, of course, we haveNFPA 652 - Standard on Fundamentals of Combustible Dusts [Ref 1]– the catchall standard that supports another handful of industry- and commodity-specific NFPA standards on this topic [Ref 2]. Pretty much all standards and guidelines around the world require that some form of dust explosion/ fire hazard assessment be performed on powder handling facilities. Most people would agree that to properly perform such a hazard assessment (termed a Dust Hazard Analysis (DHA) in NFPA 652) requires some knowledge of fire/ explosion/ thermal stability properties of the powders that are handled. **Yet there are still companies that have no such data** (and indeed, some that have not even performed their Dust Hazard Analysis**.**

Why is this?

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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

EXPLAINERS: What are flammable and combustible liquids?

What are flammable and combustible liquids?

In process safety we often hear the terms 'Flammable Liquid' and Combustible Liquid' used, sometimes seemingly interchangeably! In fact, there is an important difference between the two terms and it's important to understand these differences to avoid

mistakes and to ensure you keep your process plant and operations safe. To complicate matters more, the term 'flammable liquid' can be subdivided to give more information on a liquid's properties; we have Class IA, Class IB and Class IC. Similarly, combustible liquids subdivide into Class II, Class IIIA and Class IIIB.

We use the definitions from NFPA 30, Flammable and Combustible Liquid Code, as our guiding source of information in North America.

Flammable liquid

A Flammable Liquid is any liquid having a closed–cup flash point below 100°F, and having a vapor pressure not exceeding 40 psia at 100°F.

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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]

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