

Craig Equipment Company

13055 MIDDLETOWN INDUSTRIAL BLVD, LOUISVILLE, KY 40223
TF:800-928-7100 • T:502-245-4840 • F:502-245-1665 craig-equip.com

Combustible Dust – SAMPLE SUBMISSION FORM

PO #:	
Company Name:	
Contact Name:	Contact Phone:
Sample ID:	Contact Email:
Sample Weight:	Date:

☐ **Particle Size Reduction (if requested)**

- ☐ Sieving only
☐ Sieving and milling (not recommended for metals)

☐ **Drying to less than 5 wt.%**

Step #1:

☐ Explosibility Screening Test (Go/No-Go Test)

Test method: ASTM E1226

Determines if your material is explosible.
Explosible means your dust can explode in a dust cloud.

Material needed: at least 100 grams



Step #2:

☐ Explosion Severity Test (K_{St} and P_{max})

Test method: ASTM E1226 (K_{St} , dP/dt_{max} and P_{max})

Provides information for explosion protection by determining the maximum pressure output and the maximum rate of pressure rise.

Material needed: at least 500 grams



Step #3:

☐ Minimum Ignition Energy (MIE)

☐ Electrostatic hazards

☐ Electrical/electronic hazards

Test method: ASTM E2019. Please indicate whether the test is performed with inductance (electrical/electronic hazards) or without inductance (electrostatic hazards).

Helps avoid explosions caused by electrical or electrostatic ignition sources.

Material needed: at least 100 grams

☐ Minimum Explosible Concentration (MEC)

Test method: ASTM E1515

Helps avoid explosions by determining the minimum amount of material in air needed for a reaction.

Material needed: at least 100 grams

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Optional Testing – Custom Test Selection (check individual tests below)

Select	Description	Usable Sample Needed	
		Grams	Lb
☐	Minimum Ignition Temperature of a Dust Cloud (MIT) Test method: ASTM E1491	100	0.25
☐	Fire Risk Screening Test, N.1 Test (Combustibility) Test methods: VDI 2263 Part 1 and UN 4.1	300	0.75
☐	Minimum Ignition Temperature of a Dust Layer (LIT) Test method: ASTM E2021	500	1
☐	1 m ³ Challenge Test Large-scale explosion test	6,800	15

Additional Testing to Be Considered for Metals

☐	Combustibility Screening – Using ABC Fire Extinguisher Media Test methods: VDI 2263 Part 1 and UN 4.1		
☐	Combustibility Screening – Using Water Test methods: VDI 2263 Part 1 and UN 4.1		
☐	Dangerous When Wet Test Test method: UN 4.3		
☐	Volume Resistivity Test Test method: ASTM D257		
☐	Explosibility Screening (Go/No-Go) Test methods: VDI 2263 Part 1 and ASTM E1226		

Sample quantities for metal tests vary. Craig Equipment will confirm how much to send.

Special Instructions

Shipping Instructions

- Include the Safety Data Sheet (SDS) for each sample in the box.
- Clearly label each sample container.
- Include one completed Sample Submission Form for each sample.
- Provide enough sample for the tests requested.
- Package samples in a secure, airtight container.
- Some metal powders are regulated for shipping. Call before shipping metal dusts.

Ship To:

Craig Equipment Company, Inc.
Attn: DHA Samples
13055 Middletown Industrial Blvd
Louisville, KY 40223
502-245-4840