Sender:

To:
Institut für Arbeitsschutz der DGUV (IFA)
Bereich „Explosionsschutz“
Alte Heerstrasse 111
53757 Sankt Augustin, Germany

Determining of combustion and explosion properties of dusts based upon the comments

1	**Name and address of the company:** **Name:** **Address:** **Contact person in the company:** **Our ref.:** **Telephone number:** **E-mail address:**	
2	**Invoice address** **Name of the company:** **Address:** **VAT No.:** **Contact person for the invoice:** **Telephone number:** **E-mail address:**	

3	**Sample No:**	
3.1	**Substance name**	
3.2	**Processing method** More detailed information on the processing method generating the dust.	
3.3	**Trade name, if applicable**	
3.4	**Manufacturer/supplier, if applicable**	
3.5	**Material data** Composition For example: individual components of mixtures	
3.6	**Known properties** For example: toxicity, toxic combustion products (the material safety data sheet is appended if available) Carcinogenic substances of category 1A & 1B (H350, H350i) are excluded from the testing. In the case of acute toxicity category 1 & 2 (H300, H310, H330) tests can be carried out provided that the mass fraction does not exceed 7%. In the case of acute toxicity category 3 (H301, H311, H331), tests can be carried out provided the mass fraction does not exceed 25%.	
3.7	**Sampling point** For example: collector, pipe, grinder, etc. (photographs appended if applicable)	
3.8	**Name of the person who took the sample**	

4	**Laboratory tests** (please tick desired test)			

Sample preparation		**Parameters**	**Required sample quantity**	
Fee No	**Item**			
14010	Particle-size distribution and moisture measurement	Median [µm]	Approx. 50 g	X
	Testing in the original state (without fractionation and drying)	Selection required		☐
14020/14021	Fractionation (see explanations)			☐

Note: 14010 (optionally 14020/14021) is always part of the basic test.

	Deposited dust			
14030	Determining of the burning class	BC	Approx. 200 g	☐
14031	Determining of the burning class (100 °C)	BC (100 °C)	Approx. 200 g	☐
14032	UN classification N. 1 Sub-class 4.1	BC (UN)	Approx. 500 g	☐
14040	Minimum ignition temperature of the 5 mm dust layer	GT	Approx. 1 kg	☐
14050	Auto-ignition behaviour of a dust accumulation, in accordance with *Grewer*	AIG	Approx. 200 g	☐
14051	Auto-ignition behaviour of a dust accumulation (hot storage test, isoperibol method)	AIT	Approx. 20 kg	☐
14060	Sensitivity to shock in accordance with *Lütolf*	SL	Approx. 200 g	☐
14070	Specific electrical resistance of a dust accumulation	R_D	Approx. 200 g	☐

	Raised dust			
14080	Screening test of explosibility with modified Hartmann apparatus **(only ST 1 can be determined)**	ST 1	Approx. 500 g	☐
14090	Explosion parameters of dust/air mixtures, 20 l sphere (LEL only)	LEL	Approx. 1 kg	☐
14092	Explosion parameters of dust/air mixtures, 20-l-sphere	LEL, P_{max}, K_{St}	Approx. 3 kg	☐
14100	Explosion parameters of dust/air mixtures, 1-m³-vessel	LEL, P_{max}, K_{St}	Approx. 25 kg	☐
14101	Limiting oxygen concentration of dust/air mixtures, 1-m³-vessel (only in conjunction with Fee No 14100)	LOC	Approx. 5 kg	☐
14110	Minimum ignition energy of dust/air mixtures, with inductivity	MIE	Approx. 2 kg	☐
14111	Minimum ignition energy of dust/air mixtures, without inductivity	MIE	Approx. 2 kg	☐
14112	Minimum ignition energy of dust/air mixtures, with and without inductivity	MIE	Approx. 4 kg	☐
14120	Minimum ignition temperature of raised dusts	MIT	Approx. 500 g	☐

Further comments:

The general purchase terms and conditions of the contracting entity do not apply. This applies even if the application was not expressly contradicted.

Date: Signature:

Please deliver to:
Institut für Arbeitsschutz der DGUV (IFA)
Mr. Sascha Hohmann
Bereich „Explosionsschutz“
Alte Heerstrasse 111
53757 Sankt Augustin, Germany