Type of dust (Continued)	Ignition temp of dust cloud (deg C)	Min spark energy required for ignition of dust cloud (millijoules)	Min explosive concentration (oz per 1,000 cu ft)	Max explosion pressure (psi)	Rates of pressure rise (psi per sec)		Limiting oxygen percentage to prevent ignition of dust cloud by electric sparks
					Avg	Max	
Corncob meal	400	60	30	120	1,200	3,750	
Cornstarch	380	30	40	110	2,200	6,750	10
Cotton seed	470	80	55	90	800	2,500	15
Dextrin, corn	400	40	40	105	1,800	7,000	
Furfural residue	440	40	40	105	1,400	4,000	
Grain dust	430	30	55	95	1,000	2,750	
Guar seed	500	60	40	105	1,400	4,750	
Lycopodium	480	40	25	85	2,800	7,000	18
Nut shells	420	50	30	105	1,900	4,000	
Onion, dehydrated	410		130	60‡	400	1,250	
Pea, dehydrated	560	40	50	100	2,100	6,000	
Pectin	420	35	75	110	1,800	6,000	
Potato starch	440	25	45	95	2,800	8,000	
Pyrethrum	480	80	100	80	600	1,500	
Rice	440	40	45	95	1,000	2,750	
Soybean	520	50	35	100	1,200	3,250	15
Sugar	350	30	35	90	1,600	5,000	
Tung	440	240	70	110	1,400	3,500	
Wheat dust	470	50	70	105	1,500	3,500	
Wheat flour	380	50	50	95	1,200	3,750	
Yeast	520	50	50	105	1,000	2,500	
Miscellaneous							
Adipic acid	550	70	35	75	1,200	2,750	
Aluminum stearate	400	15	15	95	1,200	4,750	
Aspirin	660	25	35	85	2,000	10,000+	
Bark dust (Douglas-fir)	540	40	30	90	2,800	9,500	
Beryllium acetate	620	100	30	80	600	2,000	17
Calcium lignin sulfonic acid	590	100	160	80	600	2,000	
Carbon, activated	660			40‡	200	800	
Casein, rennet	520	60	45	65	400	1,000	17
Cellulose	480	80	55	100	1,100	2,750	18
Charcoal (pine wood)	620			40‡	200	250	
Coal, low volatile	685			45	300	600	
Coal, medium volatile	605	120	120	60	300	600	18
Coal, high volatile (Pgh seam)	610	60	55	85	800	2,250	16
Coal, subbituminous	455	60	45	95	1,200	3,000	
Cork	470	45	35	100	2,000	5,500	
Diazoaminobenzine	550	20	15	90	2,900	10,000+	
Dinitro-ortho-cresol	440	80	25	65‡	1,800	2,250	15
Diphenyl	650	60	35	65	400	1,500	
Gilsonite	580	25	20	90	1,200	3,750	
Hexamethylenetetramine	410	10	15	100	2,400	10,000+	14
Lactalbumin	570	50	40	90	900	2,750	18
Lignite	440	60	45	80	800	2,750	15
Liver protein	520	45	45	80	800	2,250	
Napalm	460	40	20	85	1,000	3,000	12
Paraformaldehyde	410	20	40	100	2,500	10,000+	
Peat, sphagnum	460	50	45	85	900	2,250	
Pentaerythritol	450	10	30	90	1,700	9,500	14
Phenothiazine	540		15	80	1,400	4,250	16
Phthalic anhydride	650	15	15	70	1,800	4,250	14
Phytosterol	380	10	25	75	1,500	3,000	
Pitch, coal tar (58% vol. matter)	710	20	35	95	1,900	6,000	15
Procaine penicillin	450		25	50‡	1,000	2,000	
Rubber, crude, hard	350	50	25	80	1,200	3,800	15
Seconbartital sodium	520	95	105	55	250	500	
Soap	430	60	45	85	600	1,750	
Sodium alkylarylsulfonate	540		130	75‡	400	1,250	
Sodium benzoate	560	80	55	85	1,800	10,000+	
Sodium carboxymethyl cellulose	350	560	150	60	300	600	
Sorbic acid	470	15	25	90	3,000	10,000+	
Sulfur	180	15	35	80	1,700	4,750	11
Vitamin B$_2$	500	80	105	80	1,000	2,250	
Wood flour	430	20	40	110	1,600	5,500	17

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*When uranium, uranium hydride, and zirconium were dispersed into air at room temperature, the dust clouds ignited under some conditions

†The oxygen reduction data in this table are based on tests made in air-CO_2 mixtures Dust clouds of thorium, titanium, uranium, zirconium, Dowmetal, and certain magnesium and magnesium-alloy powders ignited in pure CO_2.

‡Pressure and rates of pressure rise for these dusts were measured by an older testing technique