

COMBUSTIBLE DUSTS

Product	Particle size distribution μm	Lower Explosion Limit (g/m ³)	Minimum Ignition Temperature (°C)	Minimum ignition energy (mJ) (without inductance)	Maximum explosion pressure (bar)	Parameter of reactivity Kst (bar m/s)	Contained humidity %	Explosion class	Resistivity (Ωm) ⁽¹⁾
Crystal sugar	591,7	20	350	10<MIE<30	5,9	49	2	St1	A
Ground sugar	<10	20	350	30	9	116	0,4	St1	A
Dextrose	<63	60	450	100/1000	6,2	47	9	St1	A
Fructose	200	60	440	> 100	7	28	n.d.	St1	A
Starch	13	60	380	10÷30	9,1	156	11	St1	M
Stearic acid	<63	30	225	15÷30	6,9	103	n.d.	St1	M
Arabic gum	95	30	450	n.d.	9,5	192	n.d.	St1	M
Magnesium stearate	<63	30	n.d.	n.d.	n.d.	n.d.	n.d.	St1	M
Maltodextrin	91	60	> 450	> 30	9,5	180	4,1	St1	A
Cocoa	410	60	470	>10 ⁵	7,2	75	7,3	St1	n.d.
Powder milk	235	60	460	>30	8,1	90	3,9	St1	n.d.
actose	24	60	440	>10	8,3	75	0,1	St1	n.d.

INFLAMMABLE LIQUIDS

Product	Inflammability Temperature °C	Air related density	Explosion limits in the air		Volatile properties			Ignition temperature °C	Group and temperature class
			LEL % vol	UEL % vol.	Boiling temperature	Vapour tension at 20°C	Vapour tension at 40°C		
Ethyl alcohol	12	1,59	3,50	15	78,4	6 055 Pa	18 263 Pa	363	IIAT2
Ammonia	< 0°C	0,6	15	28	-33,4°C	861456	1588973	661	IIAT1

INFLAMMABLE VAPOURS

Product	Inflammability Temperature ° C	Air related density	Explosion limits in the air		Volatile properties			Ignition temperature °C	Mass volume of the liquid Kg/m3	Molar mass Kg/Kgmol
			LEL % vol	UEL % vol.	Boiling temperature	Vapour tension at 20°C	Vapour tension at 40°C			
Acetylene	< 0	0,9	2,5	100	-252,7			305		26,04

Product	Latent vaporization Heat at Tb J/Kg	Specific heat at ambient temperature J (kg G)	Ratio between specific heat rates (γ)	Coefficient (α) diffusion Cd m2/h	Minimum ignition energy (mJ)	Kg (bar m/s)	P max (bar)	Flame propagation speed (cm/s)	Group and temperature class
Acetylene	6,30*10 ⁵	2690	1,26	0,059	0,017	1415	10,6	166	IICT2