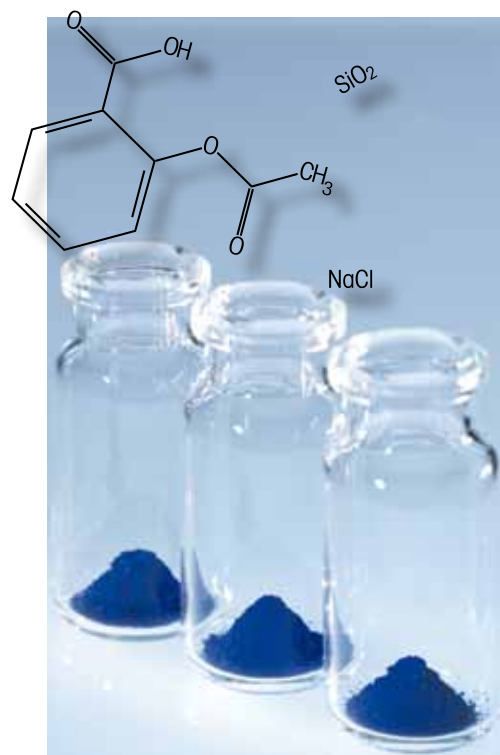


Chemical Reference Table

for Quantos QB1 powder dosing system

Thanks to extensive and long-term testing with a wide range of powders, their flow properties and influence on flow behavior have been well characterized.

We have tested over 30 representative substances to understand their basic flow properties. If yours is not listed, use the table to find substances with similar properties.



Chemical Reference Table

Chemical	CAS-No	Product-No	Particle Size [μm] 50% facile	Free flowing	Moderate flow	Crystal-line	Hygroscopic	Statically charged	Soft	Fine	Cohesive	Homogeneous	Granular
Anthraquinone	84-65-1	Sigma-Aldrich A90004	11		x								
Aspirin	50-78-2	Sigma-Aldrich A2093	353		x			x					
Benzoic acid	65-85-0	Fluka 12349	172		x					x			
Bondesil-PSA	-	Varian 12213024	58	x						x			x
Calcium carbonate	471-34-1	Fluka 21061	39	x					x				
Calcium phosphate dibasic	7757-93-9	Sigma-Aldrich C8606	8		x				x		x		
Carbazole	86-74-8	Sigma-Aldrich C5132	49	x		x				x			
Carboxymethyl cellulose, sodium salt	9004-32-4	Sigma-Aldrich 419281	117	x						x			
Cellulose acetate SAC 20	9004-35-7	Fluka 02563	36		x			x	x			x	
di-Sodium hydrogen citrate sesquihydrate	6132-05-4	Fluka 71635	272		x	x					x		
D-(+)-Glucose anhydrous	50-99-7	Fluka 49139	136		x		x		x		x		
β -Lactose	5965-66-2	Sigma-Aldrich L8773	204		x				x		x		
Magnesium stearate	557-04-0	Sigma-Aldrich 415057	9		x				x		x		
Magnesium sulfate anhydrous	7487-88-9	Fluka 63135	523	x									x
Malachite green oxalate salt	2437-29-8	Sigma-Aldrich M6880	>2000		x								
D-Mannitol	69-65-8	Sigma-Aldrich M9647	100		x				x		x		
Microcrystalline cellulose	9004-34-6	BCR 302	88		x			x	x			x	
Phenyl salicylate	118-55-8	Fluka 84340	247		x	x					x		
Polyethylene glycol	25322-68-3	Sigma-Aldrich P3640	177	x						x			
Polyvinylpyrrolidone	9003-39-8	Sigma-Aldrich PVP10	35	x		x				x			
Potassium hydrogen phthalate	877-24-7	Fluka 96148	670	x		x	x				x		
Potassium phosphate monobasic	7778-77-0	Fluka 60218	813		x	x	x						
Silicon dioxid	60676-86-0	Fluka 83340	399	x									x
Sodium acetate	127-09-3	Fluka 71185	587	x		x					x		
Sodium bicarbonate	144-55-8	Fluka 88208	212	x		x				x			
Sodium chloride	7647-14-5	Fluka 38979	127			x	x			x	x		
Sodium citrate tribasic dihydrate	6132-04-3	Sigma-Aldrich S4641	518	x		x							
Sodium tartrate dibasic dihydrate	6106-24-7	Sigma-Aldrich S4797	43		x	x					x		
D-Sorbitol	50-70-4	Sigma-Aldrich 240850	191	x						x			
Theophylline	58-55-9	Sigma-Aldrich T1633	61	x					x		x		
Triethylamine hydrochloride	554-68-7	Fluka 96249	304	x		x				x			

Chemical	CAS-No	1mg±40% (10 x)		5mg±10% (10 x)		10mg±5% (10 x)		20mg±2.5% (10 x)		50mg±1% (10 x)		100mg±1% (10 x)		250mg±1% (10 x)	
		Accuracy [%]	Duration [s]	Accuracy [%]	Duration [s]	Accuracy [%]	Duration [s]	Accuracy [%]	Duration [s]	Accuracy [%]	Duration [s]	Accuracy [%]	Duration [s]	Accuracy [%]	Duration [s]
Anthraquinone	84-65-1	-29.3	20	-3.8	24	-1.3	26	-0.9	27	-0.5	32	-0.2	42	-0.1	76
Aspirin	50-78-2	11.7	21	1.8	26	3.2	39	-0.3	84	-0.5	68	0.4	71	0.6	86
Benzoic acid	65-85-0	15.1	38	4.8	20	1.2	25	1.2	32	0.2	38	0.5	49	0.6	59
Bondesil-PSA	-	28.7	17	4.3	20	1.4	20	1.0	25	0.2	28	0.4	31	0.7	44
Calcium carbonate	471-34-1	25.5	18	3.8	19	1.1	22	0.9	26	0.3	37	0.1	41	0.5	57
Calcium phosphate dibasic	7757-93-9	19.1	22	4.5	20	1.9	22	0.9	27	0.1	38	0.2	42	0.6	62
Carbazole	86-74-8	-30.8	25	-6.8	27	-2.4	29	-1.0	29	-0.4	36	-0.4	44	-0.1	67
Carboxymethyl cellulose, sodium salt	9004-32-4	26.7	18	3.4	19	1.8	23	0.2	25	-0.2	30	-0.05	31	0.4	38
Cellulose acetate SAC 20	9004-35-7	21.6	19	4.0	32	2.9	49	1.0	56	-0.5	73	0.4	152	0.7	231
di-Sodium hydrogen citrate sesquihydrate	6132-05-4	25.6	16	2.8	21	2.0	24	0.9	28	-0.2	33	-0.1	35	0.9	87
D-(+)-Glucose anhydrous	50-99-7	20.9	19	3.1	22	1.4	27	0.6	31	0.2	41	0.3	48	0.7	71
β-Lactose	5965-66-2	21.2	19	2.7	21	2.3	26	1.0	32	0.3	40	0.3	42	0.7	60
Magnesium stearate	557-04-0	21.2	21	2.6	25	0.9	34	1.3	51	-0.1	63	0.4	67	0.5	90
Magnesium sulfate anhydrous	7487-88-9	16.2	20	2.1	24	0.4	26	-0.2	31	-0.3	36	-0.2	43	0.6	92
Malachite green oxalate salt	2437-29-8	-17.9	24	-5.7	26	-1.6	23	-0.8	27	-0.3	31	-0.4	35	-0.2	54
D-Mannitol	69-65-8	20.9	19	2.7	27	0.9	34	0.1	44	-0.5	48	0.3	63	0.5	89
Microcrystalline cellulose	9004-34-6	23.9	18	4.8	22	1.5	28	0.7	35	0.4	47	0.5	50	-0.3	72
Phenyl salicylate	118-55-8	22.3	19	0.5	23	-0.7	23	0.5	33	-0.6	47	-0.4	53	-0.3	107
Polyethylene glycol	25322-68-3	26.4	19	4.7	21	2.1	23	0.2	25	-0.4	31	-0.2	30	0.3	37
Polyvinylpyrrolidone	9003-39-8	27.1	21	2.3	21	0.5	23	0.3	27	0.03	32	0.2	41	0.7	51
Potassium hydrogen phthalate	877-24-7	31.8	26	-9.9	115	0.6	35	-0.2	65	0.2	102	0.7	136	0.4	137
Potassium phosphate monobasic	7778-77-0	28.8	20	-1.5	22	0.01	22	-1.3	23	-0.9	31	-0.1	35	0.7	61
Silicon dioxide	60676-86-0	17.0	18	3.1	20	1.1	23	0.8	27	0.03	36	0.001	39	0.4	57
Sodium acetate	127-09-3	28.4	23	-3.4	25	-1.1	28	-0.2	31	0.2	38	-0.4	34	-0.9	51
Sodium bicarbonate	144-55-8	32.5	17	5.2	20	2.3	24	0.6	25	-0.01	32	0.1	32	0.3	34
Sodium chloride	7647-14-5	12.2	21	8.6	20	2.1	23	0.6	25	0.1	31	-0.2	33	0.05	40
Sodium citrate tribasic dihydrate	6132-04-3	9.9	17	2.3	23	0.2	27	0.5	32	0.2	43	0.5	56	0.1	80
Sodium tartrate dibasic dihydrate	6106-24-7	17.8	16	1.9	24	0.9	27	0.8	35	-0.04	44	0.2	54	0.3	78
D-Sorbitol	50-70-4	25.5	19	1.7	18	1.4	21	0.1	27	-0.4	33	-0.04	32	0.6	44
Theophylline	58-55-9	13.2	17	2.0	25	1.0	28	0.8	35	0.4	52	0.8	90	0.8	112
Triethylamine hydrochloride	554-68-7	1.2	23	3.9	22	2.2	24	0.6	28	-0.1	33	-0.1	37	0.4	49

Experts in Automated Powder Dosing

Additional information including a wide range of literature, case studies, technical specifications, online webinars, and much more is also available on our website.

Automated Dosing	 <p>QUANTOS Dosing Head Portfolio The Right Head for Your Application</p> <p>The QUANTOS dosing head is unique</p> <p>The range of applications for the QUANTOS powder dosing system is wide. To meet the individual customer requirements QUANTOS offers an original range of disposable dosing heads.</p> <p>To choose the right dosing head for your application, a few questions have to be answered:</p> <ul style="list-style-type: none">• What is the total number of doses during the lifetime of your campaign?• What is the total weight of powder processed?• Do you need to dose your substance under sterile conditions? <p>The following overview helps you to choose the right head for your individual need to achieve the most accurate, precise and safe results.</p> <p>METTLER TOLEDO</p>	Automated Dosing	 <p>QUANTOS Product Overview QUANTOS</p> <p>A unique range of innovations</p> <p>The field of applications for the QUANTOS powder dosing system is wide. To meet your individual requirements, QUANTOS offers an original range of innovative product solutions to fulfil a large number of different tasks in the laboratory to increase safety, accuracy and efficiency.</p>  <p>METTLER TOLEDO</p>
	Dosing Head Portfolio		Product Overview Quantos



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