



## LABORATORY LINE Dispersing vessels and jars

Accessories for laboratory applications

# **Dispersing vessels.**

For best results.

Choosing the right dispersing aggregate is crucial for good results. An optimized vessel also contibutes to achive the desired result even more efficiently.

#### THE PROBLEM

For normal cylindrical dispersing jars, the flow creates a vortex. This causes the mixing and dispersing efficiency to decrease considerably because the product can no longer be ideally recorded or processed by the dispersing generator head. This results in an extension of the process times and thus, an increased application of energy. Depending on the formation of the vortex, an increased air intake must be expected.

#### THE SELECTION

Our GS vessels are available in chemical and temperatureresistant borosilicate glass or stainless steel. Dimensions ranges from a few milliliters to several liters, with or without a cover, with or without a sealed feedthrough.

#### THE SOLUTIONS

Our specially designed GS jars have a cloverleaf-like shape. This efficiently interrupts the flow in a radial direction and generates additional opposing flows. This high turbulences optimise the mixing and the dispersing efficiency. This minimises the processing time and reduces the processing of energy.

Our GS-stainless steel containers are equiped with a removable baffles part. The crossbars radically disturb the flow and generate additional opposing flows. As for the GS jars, strong turbulences are generated which optimizes the mixing in the dispersing vessel. The baffle parts can be easily removed after the dispersing process and be cleaned free of residues. Your sample or the product can be protected with the appropriate stainless steel cover.

#### THE MATERIALS

Borosilicate glass is a chemical and temperature-resistant glass and shows an almost inert behaviour towards most of the chemicals (stable). The sterilizable screw caps with PTFE or a silicone seal are temperature-resistant up to 180 °C. The stainless steel 18/10, which the vessels are made of, is rustproof, durable, has good insulating properties, completely hygienic, not toxic and not magnetic.



GS vessel principle (viewed from top)



Effect of the baffles part (viewed from above)

## CLOVERLEAF-LIKE SHAPED BOROSILICATE VESSEL







Sales No.	Product	Ø/H (mm)	Process volume	Thickness	Thread	Description
Open on top						
11051010	GS 15	30/100	35 ml	2.8mm	-	-
11051011	GS 25	54/150	150 ml	3.5mm	-	-
11051012	GS 40	80/200	500 ml	3.5mm	-	-
11051013	GS 50	90/250	1000 ml	3.5mm	-	-
11051014	GS 60	100/300	1300 ml	3.5mm	-	-
With screw c	ap and sealing					
11051020	GS 15K	30/100	35 ml	2.8mm	GL25	-
11051021	GS 25K	54/150	150 ml	3.5mm	GL45	-
11051022	GS 40K	80/200	500 ml	3.5mm	GL45	-
11051023	GS 50K	90/250	1000 ml	3.5mm	GLS80	-
11051024	GS 60K	100/300	1300 ml	3.5mm	GLS80	-
Incl. cover wi	ith sealing and hole	2				
11051030	GS 15KL08	30/100	35 ml	2.8mm	GL25	8mm hole
11051031	GS 15KL12	30/100	35 ml	2.8mm	GL25	12 mm hole
11051040	GS 25KL12	54/150	150 ml	3.5mm	GL45	12 mm hole
11051041	GS 25KL20	54/150	150 ml	3.5mm	GL45	20 mm hole
11051050	GS 40KL20	80/200	500 ml	3.5mm	GL45	20 mm hole
11051051	GS 40KL26	80/200	500 ml	3.5 mm	GL45	26 mm hole
11051060	GS 50KL20	90/250	1000 ml	3.5 mm	GLS80	20 mm hole
11051061	GS 50KL26	90/250	1000 ml	3.5 mm	GLS80	26 mm hole
11051070	GS 60KL20	100/300	1300 ml	3.5 mm	GLS80	20 mm hole
11051071	GS 60KL26	100/300	1300 ml	3.5 mm	GLS80	26 mm hole

#### CYLINDRICAL-SHAPED STAINLESS STEEL VESSEL

Sales No.	Product	Ø/H (mm)	Process	Thickness	Weight	Description
			volume			
With hook g	rips					
11052001	GS100-1	105/150	1000 ml	1.0 mm	412 g	-
11052002	GS100-2	135/170	2000 ml	1.2 mm	580 g	-
11052003	GS100-3	165/180	3000 ml	1.2 mm	725 g	-
11052004	GS100-4	185/185	4000 ml	1.2 mm	872 g	-
11052005	GS100-5	185/225	5000 ml	1.2 mm	998 g	-
11052006	GS100-6	185/265	6000 ml	2.0 mm	1122g	-
11052008	GS100-8	210/270	8000 ml	2.0 mm	1350 g	-
11052010	GS100-10	230/280	10 000 ml	2.0 mm	1550 g	-
With hook g	rips and a <b>cover wi</b>	th a drop hand	lle			
11052101	GS100-1.C	105/150	1000 ml	1.0 mm	495 g	-
11052102	GS100-2.C	135/170	2000 ml	1.2 mm	720 g	-
11052103	GS100-3.C	165/180	3000 ml	1.2 mm	905g	-
11052104	GS100-4.C	185/185	4000 ml	1.2 mm	1099g	-
11052105	GS100-5.C	185/225	5000 ml	1.2 mm	1225 g	-
11052106	GS100-6.C	185/265	6000 ml	2.0 mm	1349 g	-
11052108	GS100-8.C	210/270	8000 ml	2.0 mm	1671 g	-
11052110	GS100-10.C	230/280	10 000 ml	2.0 mm	1922 g	-
With hook g	rips, equipped with	a <b>baffles part</b>	inset and a <b>c</b>	over with a dro	op handle	
11052201	GS100-1.C.B.	105/150	1000 ml	1.0 mm	-	-
11052202	GS100-2.C.B.	135/170	2000 ml	1.2 mm	-	-
11052203	GS100-3.C.B.	165/180	3000 ml	1.2mm	-	-
11052204	GS100-4.C.B.	185/185	4000 ml	1.2mm	-	-
11052205	GS100-5.C.B.	185/225	5000 ml	1.2 mm	-	-
11052206	GS100-6.C.B.	185/265	6000 ml	2.0 mm	-	-
11052208	GS100-8.C.B.	210/270	8000 ml	2.0 mm	-	-
11052210	GS100-10.C.B.	230/280	10000 ml	2.0 mm	-	-

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## Our mission. Your solution.

Homogenizing perfected: for every industry.

Kinematica's broad portfolio of solutions can address almost every dispersing application for the pharmaceutical, cosmetic, chemical, food and life science industry. Innovative powder-induction systems, solutions for completely sterile environments, or fully-compliant ATEX architecture are just some examples of the broad portfolio that Kinematica can offer with true scalability from pilot-plant to large plant configurations.

Our state-of-the-art technology, in addition to a professional consulting and engineering suite of services, can address a variety of processes such as blending/mixing/stirring, emulsifying, deagglomerating, foaming, crushing and homogenizing with particle size reduction from a few micrometers down to nanometers in size: the proprietary design and innovative geometry of our aggregates/generators can downsize and provide perfect statistical particle distribution for the finest emulsions/suspensions and foam dispersions.





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