

PRODUCT CATALOGUE



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SINTERED GLASSWARE

Porosity Grades and their General Use

Porosity Grade	Pore size	General Use
G-0	160-250 micron	Coarse filtration, Gas dispersion and Support for other filter material.
G-1	100-160 micron	Coarse precipitate, filtration, Gas Dispersion, coarse grain material filtration
G-2	40-100 micron	Medium and crystalline precipitate Filtration, medium filtration and washing
G-3	16-40 micron	Fine Gas filtration and dispersion mercury filtration, fine grain material filtration, collection of fine precipitates, analytical work with medium precipitates.
G-4	10-16 micron	Valves for mercury collection of very fine Precipitates. Analytical work with fine precipitates.
G-5	1-16 micron	Valves for mercury collection of very fine Precipitates. Analytical work with fine precipitates.

CRUCIBLE: -

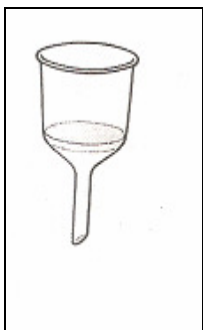
Ghooch type with sintered disc of porosity G-0 to G-5.



Cat. No.	Capacity (ML)
001/01	15
001/02	30
001/03	50

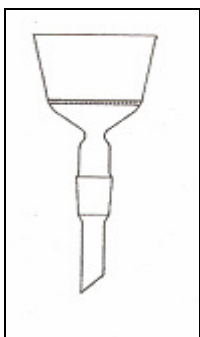
BUCHNER FUNNEL: -

With sintered disc of porosity G-0 to G-5, plain.



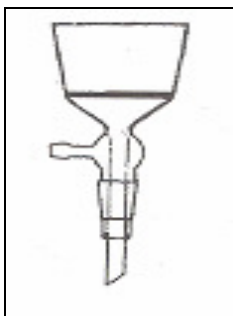
Cat. No.	Capacity (ML)	Disc Dia (MM)
002/01	35	30
002/02	80	40
002/03	100	50
002/04	200	65
002/05	500	90
002/06	1000	120
002/07	2000	125
002/08	3000	150

With sintered disc of porosity G-0 to G-5, cone at stem.



Cat. No.	Capacity (ML)	Disc Dia (MM)	Cone at stem
002/09	35	30	14/23 or 19/26
002/10	80	40	14/23 or 19/26 or 29/32
002/11	100	50	
002/12	200	65	19/26 or 24/29 or 29/32
002/13	500	90	19/26 or 24/29 or 29/32
002/14	1000	120	19/26 or 24/29 or 29/32

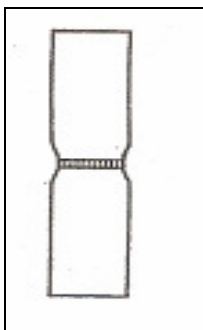
With sintered disc of porosity G-0 to G-5, cone, vaccum connection.



Cat. No.	Capacity (ML)	Disc Dia (MM)	Vaccum Connection
002/15	35	30	14/23 or 19/26
002/16	80	40	14/23 or 19/26
002/17	200	65	19/26 or 24/29
002/18	500	90	19/26 or 24/29 or 29/32
002/19	1000	120	19/26 or 24/29 or 29/32

SINTERED GLASS FILTER TUBE: -

With sintered disc sealed in center, porosity G-0 to G-5.



Cat. No.	Capacity (MM)
003/01	10
003/02	20
003/03	30
003/ 04	40
003/05	60
003/06	90

CONICAL FILTER: -

(HIRCH Type)

With sintered disc, porosity G-0 to G-5.



Cat. No.	Size Dia. (MM)	Capacity (ML)
004/01	20	25
004/02	30	60
004/03	30	175

SINTERED GLASS GAS DISTRIBUTION TUBE: -

(Filter stick)

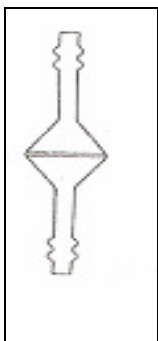
Porosity G-0 to G-5.



Cat. No.	Disc Dia (MM)
005/01	10
005/02	20
005/03	30

TUBE SEALED WITH REDUCED ENDS: -

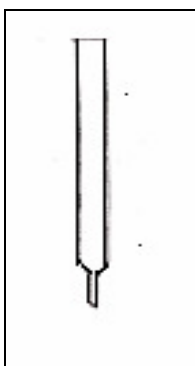
With sintered disc (pipeline filter), porosity G-0 to G-5



Cat. No.	Disc Dia (MM)
006/01	30
006/02	40
006/03	50
006/04	65
006/05	90

CHROMATOGRAPHY COLUMN (SINTERED GLASS): -

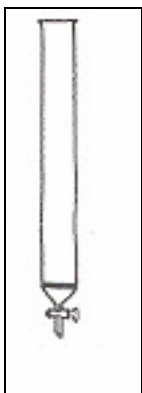
Plain, porosity G-0 to G-4.



Cat. No.	Bore (MM)	Effective Length (MM)
007/01	10	200
007/02	12	400
007/03	15	300
007/04	20	300
007/05	30	300
007/06	40	550
007/07	50	550

CHROMATOGRAPHY COLUMN (SINTERED GLASS): -

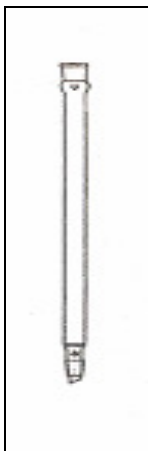
With stopcock, porosity G-0 to G-5.



Cat. No.	Bore (MM)	Effective Length (MM)
008/01	10	200
008/02	12	400
008/03	15	300
008/04	20	300
008/05	30	300
008/06	40	550
008/07	50	550

CHROMATOGRAPHY COLUMN (SINTERED GLASS): -

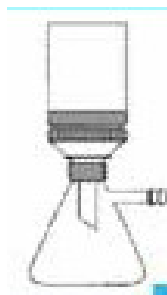
With I/C joints, porosity G-0 to G-5.



Cat. No.	Bore (MM)	Effective Length (MM)
009/01	10	200
009/02	12	400
009/03	15	300
009/04	20	300
009/05	30	300
009/06	40	550
009/07	50	550

FILTERING APPARATUS WITT'S: -

Complete with filtering flask Gooch crucible with sintered disc of porosity G-0 to G-5, glass adaptor and rubber cone.



Cat. No.	Flask capacity (ML)	Crucible capacity (ML)
010/01	250	30
010/02	500	30
010/03	1000	30

FILTERING APPARATUS WITT'S: -

Complete with flanged jar, flanged lid, funnel and 250 ml beaker.



FILTER APPARATUS: -

Complete with filter flask, with socket and Buchner funnel with sintered disc of porosity G-0 to G-5, having cone.



Cat. No.	Flask capacity (ML)	Crucible capacity (ML)	Joint
012/01	250	80	24/29
012/02	500	200	24/29
012/03	1000	500	29/32
012/04	2000	1000	29/32

MEMBRANE FILTER HOLDER (MILIPORE TYPE ASSEMBLY): -

With membrane support, funnel, flask and clamp. STD joints fitting.



Cat No.	Membrane Dia	Flask (ML)
013/01	25mm, B-29 socket	15
013/02	25mm, B-29 socket	30
013/03	25mm, B-29 socket	50
013/04	25mm, B-29 socket along with 250ml filtering flask	50
013/05	47mm, B-40 socket	300
013/06	47mm, B-40 socket along with 1000ml filtering flask	300

MEMBRANE FILTER HOLDER (MILIPORE TYPE ASSEMBLY): -

With membrane support, funnel, flask and clamp.



Cat. No.	Membrane Dia	Flask (ML)
014/01	25mm, rubber cork	15
014/02	25mm, rubber cork	30
014/03	25mm, rubber cork	50
014/04	25mm, rubber cork along with 250ml filtering flask	50
014/05	47mm rubber cork	300
014/06	47mm rubber cork along with 1000ml filtering flask	300

SINTERED DISC: -

Porosity G-0 to G-5.



Cat. No.	Dia (MM)
015/01	10
015/02	15
015/03	20
015/04	25
015/05	30
015/06	40
015/07	50
015/08	60
015/09	65
015/10	70
015/11	75
015/12	80
015/13	90
015/14	100
015/15	120
015/16	150

SPERICAL JOINTS BALL & CUP: -



Cat. No.	Ball & Cup Joints	Size	Shank Length
016/01	Capillary S-13	S-13	100
016/02	S-13	S-13	100
016/03	S-19	S-19	100
016/04	S-29	S-29	100
016/05	S-35	S-35	100
016/06	S-41	S-41	100

VISCOMETER: -

U-tube, Reverse Flow, BS/IP/RF



Cat. No.		Size	Minimum viscosity
017/01	A	2	2
017/02	B	3	6
017/03	C	4	20
017/04	D	5	60
017/05	E	6	200
017/06	F	7	600
017/07	G	8	2000
017/08	H	9	6000
017/09	I	10	20000
017/10	J	11	60000

U-tube, B S/U



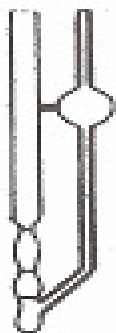
Cat. No.	Size	Viscosity Range
018/01	A	1-5
018/02	B	2-15
018/03	C	6-45
018/04	D	20-120
018/05	E	60-500
018/06	F	200-1000
018/07	G	600-4000
018/08	H	200-15000

Cannon-Fenske, for Transparent Liquids, BS/IP/CF



Cat. No.	Size	Viscosity Range
019/01	25	4-1.6
019/02	50	0.8-3.2
019/03	100	3-12
019/04	150	7-28
019/05	200	20-40
019/06	300	50-200
019/07	350	100-400
019/08	400	240-960
019/09	450	500-2000
019/10	500	1600-6400
019/11	600	4000-16000

Cannon-Fenske, for opaque liquids, ASTM-D445



Cat. No.	Size	Viscosity Range
020/01	100	3-12
020/02	150	7-12
020/03	200	20-28
020/04	300	50-200
020/05	350	100-400
020/06	400	240-960
020/07	450	500-2000
020/08	500	1600-6400
020/09	600	4000-16000

Suspended level BS/IP/SL



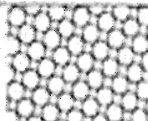
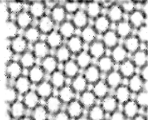
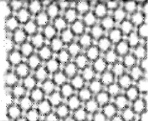
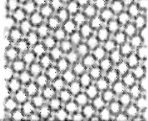
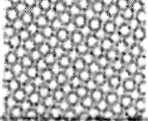
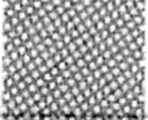
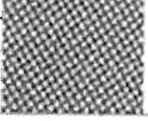
Cat. No.		Size	Viscosity
021/01	A	1	2
021/02	B	1A	6
021/03	C	2	20
021/04	D	2A	60
021/05	E	3	200
021/06	F	3A	600
021/07	G	4	2000
021/08	H	4A	6000
021/09	I	5	20000

Suspended level shortened, BS/IP/SL



Cat. No.		Size	Minimum Viscosity
022/01	A	3	2
022/02	B	4	6
022/03	C	5	20
022/04	D	6	60
022/05	E	7	200
022/06	F	8	600
022/07	G	9	2000

PORESIZES OF SINTERED GLASS FILTERS

Designation	Microscopic view	ISO 4793 - 80	BS 1752 - 83
		Porwsize in μm	Poresize in μm
Por.00		250 - 500	170 - 220
Por.0		160 - 250	100 - 160
Por. 1		100 - 160	40 - 60
Por. 2		40 - 100	10 - 15
Por. 3		16 - 40	4 - 5.5
Por. 4		10 - 16	0.9 - 1.4
Por. 5		1 - 1.6	

Safety Instructions for Borosilicate Glassware

Cleaning

Before the first use of glass-filters, they should be cleaned with diluted, warm hydrochloric acid, followed by several rinse with distilled water to remove dust loose particles. Glass filters should be cleaned immediately after their use. The surface can be wiped with a soft squeegee or brush. Surface rinsing with a wash bottle or back – flushing under the water tap is often sufficient.

Pressure and Vacuum

Even small scratches or internal abrasions of the glass surface can greatly reduce the vacuum or pressure resistance. Filter pores may clog during filtration and cause a pressure drop. In any case 1kp/cm^2 may not be exceeded. Never subject glassware to sudden pressure changes.

Temperature Resistance

The maximum allowable service temperature is approx. 500 degrees centigrade. To avoid permanent stress, the heating and cooling rate should not exceed $5^{\circ}\text{C}/\text{min}$. wet glass-filters should slowly be heated up to 80 degrees centigrade and dried for one hour, before temperature is increased. Permanent stress can reduce the mechanical and thermal resistance. Never subject glassware to sudden temperature changes.

Chemical Resistance

High concentrations of hydrofluoric acid or hot alkali solutions attack the glass with increasing temperature and can cause deterioration in the filter and a destruction of the pore size.

Safety Advice

When working with glassware always wears protective glasses and protective gloves to avoid injuries. Use a safety screen or similar protection when working with glassware subject to pressure or vacuum. Be prepared, that reagents may leak from a broken vessel. Please heed this guideline in combination with the respective state-specific regulations for the use of glassware in the laboratory.