[P] INDEX OF CONTENTS FILTRATION AND SEPARATION

[PB] Glass apparatus/Pieces 214
PBB - Glass sets 214
PBC - Soxhlet extractors 216
PBD - Soxhlet extractors, thimbles 217
PBF - Glass balls 217
PBG - Flasks, distillation 217
PBH - Flasks, Erlenmeyer 218
PBJ - Flasks, evaporation 218
PBK - Flasks, flat bottom 219
PBL - Flasks, round bottom 219
PBM - Flasks, pear-shape 220
PBN - Condensers 220
PBP - Distillation columns 222
PBQ - Connectors/Adapters 222
PBR - Extractor bodies 224
PBV - Tubes 224
PBZ - Others 225
[PD] Water purification 225
PDB - Demineralizers 225
PDD - Demineralizers, accessories 226
PDG - Distillers 226
PDJ - Distillers, accessories 227
[PG] Rotary evaporators 227
PGB - Evaporators 227
PGG - Accessories 228
[PJ] Filtration systems 229
PJB - Filtration units/Manifolds 229
PJD - Accessories 230
PJH - Filtering flasks 231
[PL] Filtration crucibles 232
PLB - Gooch 232
PLG - With poreus plates 232
[PN] Funnels 233
PNB - Short stem, glass 233
PNC - Short stem, plastic 233
PNF - Buchner, porcelain 233
PNG - Buchner, glass 234
PNM - For liquid transfer, plastic 235
PNZ - others 235
[PQ] Separating funnels 235
PQB - Squibb 235
PQD - Gilson 235
PQL - Cylindrical 236
[PS] Filter paper 236
PSB - Standard 236
PSC - Qualitative, very slow 237
PSD - Qualitative, slow 237
PSF - Qualitative, medium 238
PSG - Qualitative, fast 240
PSH - Qualitative, very fast 242
PSK - Quantitative, slow 243
PSL - Quantitative, medium 243
PSM - Quantitative, fast 244
PSN - Quantitative, very fast 245
PSP - Glass fiber 245
PSR - Membrane filters 246
PSX - Reams 248
PSZ - Others 248
[PV] Syringe filters 250
PVB - Cellulose acetate/nitrate 250
PVZ - Others 251
[PX] Vaccum pumps 252
PXB - Membrane pumps 252
PXL - Water jet pumps 252
[PZ] Others 252
PZB - Chromatography 252

TRADEMARKS:

PBB - Glass sets

Simple-fractional distillation set

The main objective of distillation is to separate a liquid blend whose components have different boiling points, or to separate volatile components from non-volatile ones.

It can be conducted in one single evaporation/condensation process, as it happens in simple distillation, or through successive simple distillations that take place in a fractioning column, as it happens in fractional distillation, with a progressive enrichment of the blend in the more volatile component and that is used when the boiling points of the components differ in less than 25ºC.

1| Made in borosilicate glass with 29/32 ground joints
2| Supplied in a case for storage and transportation

Code	Description
PBB001	Simple distillation set, 250 mL
PBB002	Fractional distillation set, 250 mL

Composed of:

Code	Description
PBL015	Round bottom flask 250 mL
PBQ028	75º bent adapter for thermometer
PBN010	Liebig condenser 300 mm
PBQ031	Bent distillation adapter 100 mm
KJB011	Thermometer of -10/110ºC
FCM010	Clip (POM) for ground joints 29/32 (3 uds)
PBP002	Vigreux column 320 mm (fractional distillation)

*Mounting stand not included

Garcia Tena set

Routine control of volatile acidity (volatile fatty acids of the acetic series) during the elaboration process of wine, cider, etc, allows determining the fermentation state of grape juice, and given that its content is limited by law, establishing the quality of the final product and foreseeing its conservation requirements.

Among the diverse methods used for its determination, it is the Garcia Tena method, approximate method through which the concentration of acetic acid, secondary product mainly coming from alcoholic fermentation, is determined.

1| Made of borosilicate glass with 14/23 ground joints
2| Supplied with a case for storage and transportation

Code	Description
PBB003	García Tena set

Composed of:

Code	Description
CDB013	Erlenmeyer flask, 50 ml
DNB007	Graduated burette, 10 ml
PBN006	Liebig condenser 120 mm
DJJ005	Volumetric pipette 1 mark, 11 ml
PBZ001	Volumetric cylinder 5.1 ml
PBZ002	Volumetric cylinder 3.2 ml
FFJ002	Alcohol lamp 100 ml
PNB001	Short stem funnel, 40 mm
PBL004	Round bottom flask, 50 ml
PBQ034	Double bent piece, 14/23
FCG008	Clamp with rotary bosshead (2 uds)
FCB006	Retort stand 100x175mm
FCM007	Clip (POM) for ground joints 14/23 (2uds)
FCV006	Closed retort ring with bosshead 80 mm
KJB011	Yellow solid stem thermometer colour spirit -10/110ºC

PBB - Glass sets

Microscale standard kit

1| Complete ground glass kit for basic laboratory assemblies
2| Specially indicated for practical lessons of organic/inorganic chemistry
3| Made of borosilicate glass with 14/23 ground joints
4| Extension kit available to assemble more complex arrangements
5| Supplied with case for storage and transportation

Code	Description
PBB004	Microscale standard kit, ground 14/23

Composed of:

Code	Description
PBN009	Liebig condenser 200 mm
PQL001	Addition funnel 25 mL
PBM001	Pear shaped flask 25 mL
PBM003	Pear shaped flask 3 necks (14/23) 100 mL
PBL001	Round bottom flask 10 mL
PBL004	Round bottom flask 50 mL
BMC013	Glass stopper
BMC016	Glass stopper with groove
PBQ026	Thermometer adapter threaded top
PBQ027	75º bent adapter for thermometer
PBQ029	Connecting adapter with hose
PBQ030	Bent distillation adapter 80 mm
PBV004	Storage tube with hose connection 20 mL
KJB013	Thermometer -10/200ºC

Microscale standard kit extension

Code	Description
PBB005	Microscale standard kit extension, ground 14/23

Composed of:

Code	Description
LDR003	Stirring rod 5/6x300 mm
PBN029	Cold finger condenser
PBM002	Pear shaped flask 2 necks (14/23) 50 mL
PBL001	Round bottom flask 10 mL
BMC013	Glass stopper
PBQ026	Thermometer adapter threaded top
PBP001	Vigreux column with jacket 250 mm
PBQ032	Claisen adapter
PBQ033	Receiver adapter for 2 flasks
PBZ003	Willstatter filter 50 mm
PBV003	Drying tube

page [215]

PBC - Soxhlet extraction systems

Soxhlet extraction system allows a solid-liquid type extraction to obtain active principles or to purify substances based on their solubility in certain solvents. Through a cyclical process of evaporation/condensation of the solvent, normally of organic nature (ether, ethanol, benzene, etc), lipid components (essential oils, fats, etc) are dissolved and extracted from a given sample

1| Made of borosilicate glass
2| Kit composed of round flask, extractor body and Dimroth condenser
3| Cellulose cotton extraction thimbles available (consult pag. 365)

50 mL

Code	Description
PBC001	Soxhlet extraction system, 50 ml

Composed of:

Code	Description	Ground	Batch
PBN026	Dimroth condenser	29/32	-
PBR001	Extractor body	19/26 y 29/32	-
PBK003	Flat bottom flask, 100 mL	19/26	10

Recommended thimbles

PBD006	Extraction thimbles 30x26x100mm*

* Not included

125 mL

Code	Description
PBC002	Soxhlet extraction system, 125 ml

Composed of:

Code	Description	Ground	Batch
PBN027	Dimroth condenser	45/40	-
PBR002	Extractor body	29/32 y 45/40	-
PBK008	Flat bottom flask, 250 mL	29/32	10

Recommended thimbles

PBD008	Extraction thimbles 36x33x80 mm*

* Not included

page [216]

250 mL

Code	Description
PBC003	Soxhlet extraction system, 250 ml

Composed of:

Code	Description	Ground	Batch
PBN028	Dimroth condenser	55/44	-
PBR004	Extractor body	29/32 y 55/44	-
PBK010	Flat bottom flask, 500 mL	29/32	10

Recommended thimbles

PBD010	Extraction thimbles 36x33x100 mm*-

* Not included

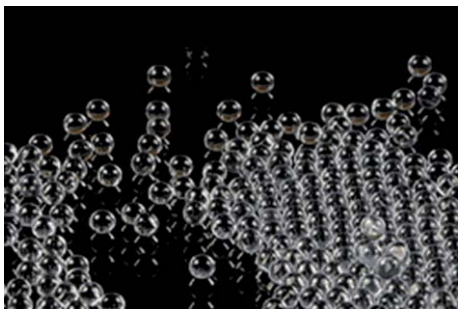
PBD - Soxhlet extraction systems, thimbles

1 | Made of high mechanical resistant pure fat-free cellulose cotton
2 | For solid-liquid Soxhlet, Kumagawa type extraction and other extraction equipments
3 | Application in food industry, analyses of atmospheric contamination, cosmetics, pharmacology, etc.

Code	Int. Ø	Ext. Ø	Height	Box of (uds)
PBD001	14 mm	16 mm	30 mm	25
PBD003	19 mm	22 mm	90 mm	25
PBD002	18 mm	22 mm	60 mm	25
PBD004	22 mm	26 mm	60 mm	25
PBD005	23 mm	27 mm	80 mm	25
PBD006	26 mm	30 mm	100 mm	25
PBD007	29 mm	34 mm	80 mm	25
PBD008	33 mm	36 mm	80 mm	25
PBD009	33 mm	36 mm	94 mm	25
PBD010	33 mm	36 mm	100 mm	25
PBD011	34 mm	37 mm	130 mm	25
PBD012	37 mm	41 mm	123 mm	25
PBD013	38 mm	41 mm	150 mm	25
PBD014	41 mm	47 mm	123 mm	25
PBD015	46 mm	52 mm	165 mm	25
PBD016	54 mm	58 mm	170 mm	25
PBD017	58 mm	62 mm	170 mm	25
PBD018	65 mm	70 mm	240 mm	25
PBD019	75 mm	80 mm	200 mm	25
PBD020	75 mm	80 mm	250 mm	25
PBD021	92 mm	95 mm	250 mm	25

PBF - Glass beads

1 | Made of sodocalcic glass



Code	Diameter	Bag of
PBF001	2 mm	1 kg
PBF002	3 mm	1 kg
PBF003	4 mm	1 kg
PBF004	5 mm	1 kg
PBF005	6 mm	1 kg
PBF006	7 mm	1 kg
PBF007	8 mm	1 kg

PBG - Flasks, distillation

page [217]

1 | Made of borosilicate glass

Code	Cap.	Neck Ø	Height	Arm Ø	Arm L	Batch
PBG001	100 mL	15 mm	174 mm	7 mm	100 mm	6
PBG002	250 mL	19 mm	216 mm	8 mm	120 mm	12
PBG003	500 mL	24 mm	275 mm	8 mm	150 mm	12
PBG004	1000 mL	28 mm	320 mm	9 mm	180 mm	4

PBH - Flasks, Erlenmeyer

Ground socket

1| Ground neck for connection and assemblies
2| White graduation
3| Made of borosilicate glass
4| According to USP/ISO4797 standards except items (*)
5| For other volumes or ground joints, consult

Code	Capacity	Ground	Ø (base)	Height	Batch
PBH001*	25 mL	14/23	42 mm	75 mm	10
PBH002*	25 mL	19/26	42 mm	75 mm	10
PBH003	50 mL	14/23	51 mm	85 mm	-
PBH004	50 mL	19/26	51 mm	85 mm	10
PBH005*	50 mL	24/29	64 mm	85 mm	10
PBH006	50 mL	29/32	64 mm	85 mm	10
PBH007*	100 mL	14/23	64 mm	105 mm	10
PBH008	100 mL	19/26	64 mm	105 mm	10
PBH009*	100 mL	24/29	64 mm	105 mm	10
PBH010	100 mL	29/32	64 mm	105 mm	10
PBH011	150 mL	19/26	-	-	10
PBH012	150 mL	29/32	-	-	10
PBH013	250 mL	19/26	85 mm	140 mm	10
PBH014	250 mL	24/29	85 mm	140 mm	10
PBH015	250 mL	29/32	85 mm	140 mm	10
PBH016	500 mL	24/29	105 mm	175 mm	10
PBH017	500 mL	29/32	105 mm	175 mm	10
PBH018*	1000 mL	29/32	131 mm	220 mm	10
PBH019	2000 mL	29/32	166 mm	280 mm	6

Ground cone

1| Suitable for filtration assemblies
2| Made of borosilicate glass, not graduated

Code	Capacity	Ground (C)
PBH030	1000 mL	40/35

page [218]

PBJ - Flasks, evaporation

Flasks, evaporation

1| Evaporating flask suitable for rotary evaporators
2| Made of borosilicate glass and ground neck

Code	Capacity	Ground (S	Batch
PBJ001	50 mL	29/32	10
PBJ002	100 mL	29/32	10
PBJ003	250 mL	29/32	10
PBJ004	500 mL	29/32	10
PBJ005	1000 mL	29/32	10
PBJ006	2000 mL	29/32	6

PBK - Flasks, flat bottom

Flasks, flat bottom

1| Flat bottom round flask with ground neck
2| Made of borosilicate glass
3| According to USP and ISO/DIN 4797 standards
4| For other volumes or ground joints, consult

Code	Capacity	Ground	Height	Ø (base)	Batch
PBK001	50 mL	14/23	85 mm	51 mm	10
PBK002	50 mL	29/32	85 mm	51 mm	10
PBK003	100 mL	19/26	103 mm	64 mm	10
PBK004	100 mL	24/29	103 mm	50 mm	10
PBK005	100 mL	29/32	103 mm	64 mm	10
PBK006	250 mL	19/26	130 mm	85 mm	10
PBK007	250 mL	24/29	130 mm	85 mm	10
PBK008	250 mL	29/32	130 mm	85 mm	10
PBK009	500 mL	24/29	160 mm	103 mm	10
PBK010	500 mL	29/32	160 mm	160 mm	10
PBK011	1000 mL	24/29	187 mm	131 mm	10
PBK012	1000 mL	29/32	187 mm	131 mm	10
PBK013	2000 mL	29/32	230 mm	166 mm	6

PBL - Flasks, round bottom

1 neck

1| Round bottom spherical flask with ground neck
2| Made of borosilicate glass
3| According to USP and ISO/DIN 4797 standards except items (*)
4| For other volumes or ground joints, consult

Code	Capacity	Ground	Height	Ø (base)	Batch
PBL001	10 mL	14/23	35 mm	70 mm	10
PBL002	25 mL	14/23	85 mm	41 mm	10
PBL003*	25 mL	19/26	85 mm	41 mm	10
PBL004	50 mL	14/23	90 mm	51 mm	10
PBL005	50 mL	19/26	90 mm	51 mm	10
PBL006	50 mL	24/29	115 mm	51 mm	10
PBL007	50 mL	29/32	115 mm	51 mm	10
PBL008	100 mL	14/23	105 mm	64 mm	10
PBL009	100 mL	19/26	105 mm	64 mm	10
PBL010	100 mL	24/29	105 mm	64 mm	10
PBL011	100 mL	29/32	105 mm	64 mm	10
PBL012	250 ml	14/23	140 mm	85 mm	10
PBL013	250 mL	19/26	140 mm	85 mm	10
PBL014	250 mL	24/29	140 mm	85 mm	10
PBL015	250 mL	29/32	140 mm	85 mm	10

page [219]

1 neck

1| Round bottom spherical flask with ground neck
2| Made of borosilicate glass
3| According to USP and ISO/DIN 4797 standards except items (*)
4| For other volumes or ground joints, consult

Code	Capacity	Ground	Height	Ø (base)	Batch
PBL016*	500 mL	19/26	163 mm	105 mm	10
PBL017	500 mL	24/29	163 mm	105 mm	10
PBL018	500 mL	29/32	163 mm	105 mm	10
PBL019	1000 mL	24/29	200 mm	131 mm	10
PBL020	1000 mL	29/32	200 mm	131 mm	10
PBL021	2000 mL	24/29	240 mm	166 mm	10
PBL022	2000 mL	29/32	240 mm	166 mm	10

PBL - Flasks, round bottom

2-3 necks

1| Round bottom spherical flask with ground neck
2| Made of borosilicate glass
3| According to USP and ISO/DIN 12394
4| For other volumes or ground joints, consult

Code	Capacity	Necks	Ground 1	Ground 2	Ground 1	Height
PBL028	250 mL	2	24/29	19/26	--	140 mm
PBL029	500 mL	2	24/29	19/26	--	163 mm
PBL030	1000 mL	3	29/32	29/32	29/32	200 mm

PBM - Flasks, pear-shape

Code	Capacity	Ground (S)	Necks
PBM001	25 mL	14/23	1
PBM002	50 mL	14/23	2
PBM003	100 mL	14/23	3
PBM004	250 mL	29/32	1

PBN - Condensers

Allihn (with balls)

1| Balls condenser with double ground neck
2| Made of borosilicate glass

Code	L. (useful)	L (total)	Grounds
PBN001	160 mm	280 mm	14/23
PBN002	250 mm	386 mm	29/32

page [220]

Liebig West

1| Condenser with jacket and double ground neck except (*).
2| Made of borosilicate glass

Code	L. (useful)	L (total)	Grounds
PBN005	100 mm	220 mm	14/23
PBN006*	120 mm	250 mm	14/23 (H)
PBN007	150 mm	270 mm	14/23
PBN008	200 mm	350 mm	19/26
PBN009	200 mm	310 mm	14/23
PBN010	300 mm	460 mm	29/32
PBN011	300 mm	450 mm	19/26
PBN012	400 mm	560 mm	29/32
PBN013	400 mm	570 mm	19/26

PBN - Condensers

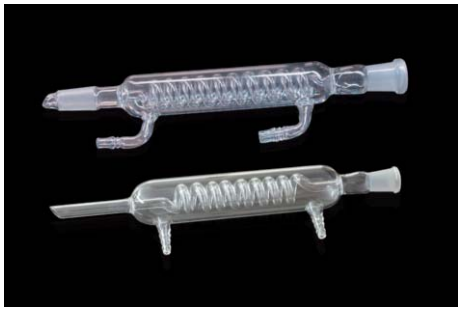
Liebig West without ground joint

Code	L. (useful)	L (total)
PBN014	200 mm	350 mm
PBN015	200 mm	400 mm

Coil condenser

1| It has an inner coil through which vapour flows and condenses
2| The refrigerating liquid flows through the external jacket
3| Made of borosilicate glass

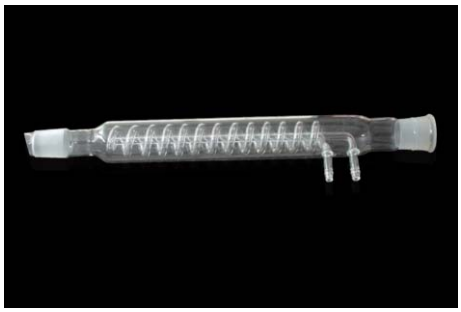
Code	L. (useful)	L (total)	Grounds	
			Socket (S)	Cone (C))
PBN016	120 mm	195 mm	–	–
PBN017	120 mm	205 mm	14/23	–
PBN018	120 mm	215 mm	14/23	14/23
PBN019	160 mm	270 mm	14/23	–
PBN020	200 mm	300 mm	–	45/40
PBN021	250 mm	400 mm	19/26	–
PBN022	350 mm	460 mm	–	–
PBN023	350 mm	470 mm	29/32	–



Dimroth

1| It has an inner coil through which the refrigerating liquid flows
2| The vapour flows through the coil exterior
3| Made of borosilicate glass

Code	L. (useful)	L (total)	Grounds	
		Socket (S)	Cone (C))	
PBN025	160 mm	300 mm	14/23	14/23
PBN024	250 mm	400 mm	29/32	29/32



page [221]

Dimroth for Soxhlet

Code	L. (useful)	L (total)	Ground (M)
PBN026	160 mm	270 mm	29/32
PBN027	180 mm	310 mm	45/40
PBN028	200 mm	360 mm	55/44

PBN - Condensers

Cold finger condenser

1 | It allows having a localized cold spot
2 | Made of borosilicate glass

Code	Ground (M)	Hose
PBN029	14/23	13 mm

PBP - Distillation columns

Distilling columns (Vigreux)

1 | Suitable for the fractional distillation set
2 | Made of borosilicate glass

Code	Length	Diameter	Ground	Jacket
PBP001	250 mm	25 mm	14/23	Yes
PBP002	320 mm	32 mm	29/32	No

PBQ - Connectors/Adapters

Double bent piece

Code	Diameter	Length	Ground	Batch
PBQ021	7 mm	160 mm	-	10
PBQ022	12 mm	250 mm	-	5
PBQ034	7 mm	160 mm	14/23 (C/C)	10
PBQ035	25 mm	280 mm	29/32 (C/C)	2

page [222]

Thermometer adapters, with threaded top

1 | With threaded top to fit a control thermometer

Code	Thread	Ground	Angle
PBQ026	13	14/23 (C)	-
PBQ027	8	14/23 (C/C)	75º
PBQ028	18	29/32 (C/C)	75º

PBQ - Connectors/Adapters

Adapter with hose connection

Code	Ground	Hose Ø
PBQ029	14/23 (C/S)	10 mm

Bent distillation adapter

1 | 105º angle

Code	Length	Ground	Ø (tube)
PBQ030	80 mm	14/23	9 mm
PBQ031	100 mm	29/32	13 mm

Claisen thermometer adapters

Code	Thread	Ground	Angle
PBQ032	13	14/23 (S/C/C)	-

Separating receiver

Code	Ground	Hose Ø
PBQ033	14/23 (C/S)	10 mm

page [223]

PBR - Extractor bodies

Extractor body

Code	Capacity	Ground (C)	Ground (S)
PBR001	50 mL	19/26	29/32
PBR002	125 mL	29/32	45/40
PBR004	250 mL	29/32	55/44

PBV - Tubes

Digestion tubes

1| MAde of borosilicate glass with thick walls and round bottom
2| Diameter 42 mm

Code	Length	Constriction	Digester
PBV001	300 mm	Yes	Buchi
PBV002	300 mm	No	Tecator and others

Storage tube with hose connection

Code	Cap.	Ground	Hose Ø
PBV004	20 mL	14/23	10 mm

page [224]

Drying tube

Code	Ground
PBV003	14/23

PBZ - Others

Volumetric cylinder

Code	Capacity	Diameter	Height	Batch
PBZ001	5.1 mL	12 mm	110 mm	10
PBZ002	3.2 mL	12 mm	110 mm	10

PBZ - Others

Willstatter filter

1 | For the volatile acidity Garcia Tena method

Code	Ground	Diameter
PBZ003	14/23	45 mm

PDB - Demineralizers

Lab-Ion L2 model

1 | Wall demineralizer to obtain distilled water
2 | Calcination residue under 1mg/liter
3 | Replacement cartridge filled with special resin, bio-degradable and economic
4 | Supplied complete with wall support

Code	PDB001
Ultra-pure water	0,1-20 µS/cm
Production (max.)	40 L/h (at 4 bar)
Capacity (máx.)	810 L (at 5ºdH)
Resin	Disposable mixed bed
Dimensions	115 x 515 mm
Power supply	110-220V, 50/60 Hz

Micromatic model

1 | Purifies tap water to Type II Analytical Grade Water for general laboratory use
2 | Digital interface and microprocessor control for:
- Continuous monitoring of the produced water
- Control of the state of the device (in production, full tank, fuse…)

3 | Quick and easy maintenance without necessity of regular cleaning with acids
4 | Ecological: significant savings in natural resources such as electricity and water
5 | The equipment is delivered calibrated from factory (SGC ISO9001)

Code	PDB003	PDB002
Production flow	2,5 L/h	
Conductivity	< 1 µS/cm	
Silica removal	>99%	
Reverse osmosis efficiency	95/99%	
Tank	No	Yes (25 L)
Dimensions	45x25x40 cm	
Power	100-240 V, 50-60 Hz	
Weight in operation	9 kg	

page [225]

PDD - Demineralizers, accessories

CHART 1: 'Accessories demineralizer LAB-Ion L2'

	Code	Description	Model	
			Lab-Ion L2	Micromatic
	PDD001	Cartridge for demineralizator	☐	
	PDD002	Pretreatment cartridges, Pack of 2 units		☐
	PDD003	Resin cartridges Pack of 4 units		☐
	PDD004	Osmosis cartridge 3 L/h		☐

i = Accessory included with the indicated equipment

☐ = Accessory compatible with the indicated equipment

PDG - Distillers

Glass, model Basic pH4

RS Lab

1| Continuous distilled water production
2| It has a safety thermostat
3| Robust heating block with chromeplated resistance. Borosilicate glass set

Code	PDG001
Production	4 L/h
Conductivity (running water)	3.0-4.0 µS/cm
Conductivity (treated water)	1.5-2.0 µS/cm
pH	5.5-6.0
Resistance	1 x 3000 W
Dimensions	50x15x45 cm
Power supply	220V, 50Hz
Weight	6 kg

page [226]

Glass, model Quartz

nahita blue

1| Continuous distilled water production. Quartz resistance
2| Safety system with water entry flow sensor
3| Made completely of high quality borosilicate glass
4| With adapted support for wall mounting

Code	PDG002
Production	4 L/h
Conductivity (running water)	2 µS/cm
Conductivity (treated water)	1,0 L/min
Resistance	1 x 2500 W
Dimensions	55x15x50 cm
Power supply	230V, 50/60Hz, 11A
Weight	4 kg

PDG - Distillers

Model 4000

1| Detachable safety frontal display in semitransparent acrylic
2| Safety system with water entry flow sensor
3| Heating resistances protected with a quartz sheath
4| Borosilicate glass set

Code	PDG003
Production	4 L/h
Conductivity (running water)	2 µS/cm
Conductivity (treated water)	1,4 L/min
Resistance	2 x 2500 W
Dimensions	55x22x40 cm
Power supply	230V, 50/60Hz, 13 A
Weight	12 kg

PDJ - Distillers, accessories

CHART 2: 'Accessories distillers Basic pH 4 and Quartz'

Code	Description	For model
PDJ001	Heating block with resistance	Basic pH 4
PDJ002	Set of joints and connectors	Basic pH 4
PDJ003	Hose set	Basic pH 4
PDJ004	Glass boiler	Basic pH 4
PDJ005	Glass condenser	Basic pH 4
PDJ006	Metal support	Basic pH 4
PDJ007	2 fixing devices f/ boiler	Basic pH 4
PDJ008	Boiler	Quartz
PDJ009	Condenser	Quartz
PDJ010	Level	Quartz
PDJ011	Quartz resistance	Quartz
PDJ012	Flow limiter	Quartz

PGB - Evaporators

500 and 503 models

1| Stainless steel heating bath with LED digital control (Model 500) and analogic control (Model 503) of the temperature
2| Elevating motorized system (Model 500) of the glass set
3| Analogic adjustment of the rotation speed
4| 29/32 ground joints borosilicate glass set (included). 500 mL evaporating flask

Code	PGB001	PGB002
Model	500	503
Bath capacity	3 L	3 L
Rotation speed	10-90 rpm	
Temperature	RT-100 ºC	
Inclination angle	45º	
Head adjustment	150 mm Motorized	150 mm Manual
Power supply	220V, 50/60Hz	

REF. PGB002

REF. PGB001

page [227]

PGB - Evaporators

RS 100-PRO model

1| Large LCD display with continuous digital monitoring
2| Temperature control with adjustable safety circuit
3| Patented condenser (1500 cm2 condensing surface)
4| Motorized elevator with quick-action system with adjustable final position recognition
5| Patented pressure spring that results in a perfectly hermetic system
6| Double PTFE coating resistant to chemical agents
7| Borosilicate glass set (included). 1 L evaporating flask
8| USB connection for PC control

Code	PGB006	PGB007
Model	Borosilicate	Borosilicate, coated
Bath capacity	5 L	
	20-280 rpm (reversible rotation)	
Temperature	RT-180 °C (± 1)	
Timer range	1 a 999 min	
Head trajectory	150 mm, motorized	
Power	1400 W	
Dimensions (LxWxH)	465x457x583 mm	
Power supply	220-240V, 50/60Hz	
Protection class (DIN EN60529)	IP20	

PGG - Accessories

CHART 3: 'Accessories rotary evaporators model 500 and 503'

	Code	Capacity	Model 500	Model 503
	PGG001	Condenser 29/32	☐	
	PGG002	Distribution head 29/32	☐	
	PGG003	250 mL flask, 29/32	☐	
	PGG004	Inlet pipette with tube and stopcock, 24/29	☐	
	PGG006	Vapour ducting piece, 29/32	☐	☐
	PGG007	500 mL flask, 29/32	☐	☐
	PGG008	Condenser ground joint 29/32		☐

i = Accessory included with the indicated equipment

☐ = Accessory compatible with the indicated equipment

page [228]

PGG - Accessories

CHART 4: 'Accessories rotary evaporators RSLAB 100-PRO

	Code	Description	Model RS 100-PRO
	PGG014	Complete vertical glassware, 1L	☐
	PGG015	Complete vertical glassware 1L, coated	
	PGG016	Flask adapter, 29-32, 24-29	☐
	PGG017	Flask adapter, 29-32, 19-16	
	PGG018	Flask adapter, 29-32, 14-23	
	PGG019	Foam brake piece, 250 mL (29/32)	☐
	PGG020	Vapour tube piece, ground 29/32	☐
	PGG021	Seal R-type PTFE	☐
	PGG022	Sealing stopper for evaporator	☐
	PGG024	Receiving flask, 100 mL Ground 35-20	☐
	PGG025	Receiving flask, 250 mL Ground 35-20	
	PGG026	Receiving flask, 500 mL Ground 35-20	
	PGG027	Receiving flask, 1000 mL Ground 35-20	
	PGG028	Receiving flask, 2000 mL Ground 35-20	

i = Accessory included with the indicated equipment

☐ = Accessory compatible with the indicated equipment

PJB - Filtration units/Manifolds

Filtration assembly, 300 mL

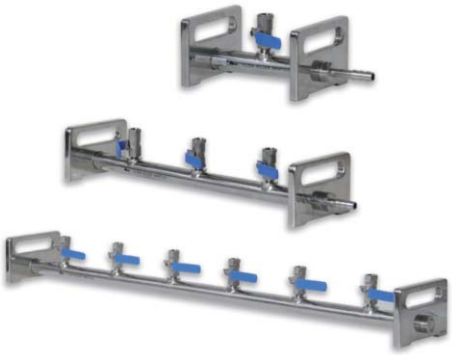
1| Vacuum filtration for analyses of contamination, filtration of solvents for HPLC, etc.
2| Borosilicate glass set ground joints 40/32
3| Filtration plate (Ø 40 mm) with built-in vacuum connection
4| Graduated filtration funnel and anodized aluminum clamp

Code	PJB001	
Composed of:	PJD002	Filtration funnel, 300 mL
	PJD003	Body with fritted glass disk
	PBH030	Erlenmeyer flask (40/35), 1000 mL
	PJD006	Anodized aluminum clamp

page [229]

PJB - Filtration assemblies/manifolds

Simple circuit vacuum manifolds



1| Vacuum filtration for microbiological controls, quality control, analyses of water, solvents, etc.
2| Simple circuit vacuum manifolds of 1, 3 and 6 places
3| Made of autoclavable stainless steel (316 L)
4| They have independent keys or control valves
5| Rubber connections included

Code	Places	Valve	Hose	Dimensions
PJB002	1	90º	12 mm	240x120x90 mm
PJB003	3	90º	12 mm	480x120x90 mm
PJB004	6	90º	12 mm	840x120x90 mm

Double circuit vacuum manifolds

1| Vacuum filtration for microbiological controls, quality control, analyses of water, solvents, etc.
2| Double circuit vacuum manifolds of 3 positions for continuous filtration
3| Made of autoclavable stainless steel (316L)
4| They have independent keys or control valves. Rubber connections included

Code	Places	Valve	Hose	Dimensions
PJB005	3	90º	12 mm	470x120x90 mm

PJD - Accessories

CHART 5: 'accessories filtration assembly of 300 mL'

	Code	Description	Model Filtration assembly
	PJD002	Filtration funnel of 300 mL	☐
	PJD003	Body with fritted glass disk	☐
	PJD006	Anodized aluminum clamp	☐

= Accessory included with the indicated equipment

= Accessory compatible with the indicated equipment

page [230]

PJD - Accessories

CHART 6: 'accessories vacuum manifolds'

	Code	Description	Model Vacuum manifolds
	PJD001	Glass filter holder, 300 mL	☐
		Composed of:	
	PJD002	Filtration funnel, 300 mL	
	PJD004	Body with fritted glass disk and silicon stopper	
	PJD005	Silicon stopper 1 hole f/manifold	
	PJD006	Anodized aluminum clamp	
	PJD007	Glass filter holder-manifold connector	
	PJD008	Stainless steel filter holder, 300 mL	☐
	PJD009	Stainless steel filter holder, 500 mL	
		Composed of:	
	PJD011	Stainless steel filtration funnel 300 mL*	
	PJD012	Stainless steel filtration funnel 500 mL*	
	PJD013	Stainless steel filtration body	
	PJD014	Stainless steel grating	
	PJD006	Anodized aluminum clamp	
		*They include stainless steel stopper (PJD010)	
	PJD010	Stainless steel stopper for filtration funnels	☐
	PJD015	Silicone cap for double manifold	☐

i = Accessory included with the indicated equipment

☐ = Accessory compatible with the indicated equipment

PJH - Filtering flasks

Glass

ENDO glassware

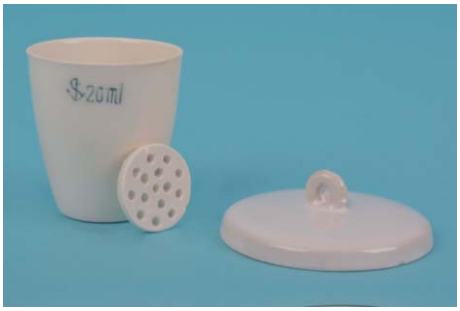
1 | Graduated with white marking area
2 | With lateral hose connection to connect vacuum pumps or water jet pumps
3 | Borosilicate glass

Code	Cap.	Neck Ø (int.)	Hose Ø	Batch
PJH001	250 mL	30 mm± 2 mm	12 mm	6
PJH002	500 mL	29 mm± 2 mm	12 mm	6
PJH003	1000 mL	33 mm± 2 mm	16 mm	2
PJH004	2000 mL	40 mm± 2 mm	16 mm	-

page [231]

PLB - Gooch

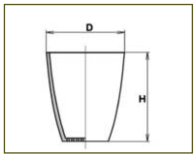
Gooch crucible



1| Glazed except rim and base
2| With poreus disk and glazed lid with handle

Code	Capacity	Diameter	Height
PLB001	15 mL	32 mm	34 mm
PLB002	20 mL	36 mm	38 mm
PLB003	30 mL	40 mm	46 mm

Gooch crucible



1| With poreus disk; without lid
2| Glazed except rim and base

Code	Capacity	Diameter	Height	Batch
PLB004	17 mL	30 mm	36 mm	5
PLB005	25 mL	35 mm	43 mm	5
PLB006	35 mL	39 mm	49 mm	5
PLB007	120 mL	60 mm	71 mm	5

PLG - With poreus plate

With poreus plate, porcelain

1| Poreus bottom; without lid. Glazed except rim and base

Code	Poresity	Volume	Batch
PLG001	6 µm	8 mL	2
PLG004	6 µm	15 mL	2
PLG007	6 µm	25 mL	2
PLG010	6 µm	35 mL	2
PLG013	6 µm	50 mL	2
PLG002	7 µm	8 mL	2
PLG005	7 µm	15 mL	2
PLG008	7 µm	25 mL	2
PLG011	7 µm	35 mL	2
PLG014	7 µm	50 mL	2
PLG003	8 µm	8 mL	2
PLG006	8 µm	15 mL	2
PLG009	8 µm	25 mL	2
PLG012	8 µm	35 mL	2
PLG015	8 µm	50 mL	2

page [232]

PNB - Short stem, glass

Short stem, glass

1| For transferring liquids or filtering solution
2| 60º cone angle and borosilicate glass (*)

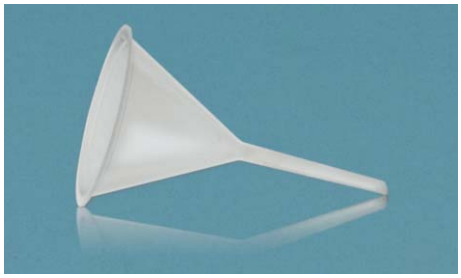
Code	Funnel Ø	Cap.	Stem Ø	Filter Ø	Batch
PNB001	40 mm	10 mL	4 mm	50-60 mm	12
PNB002	50 mm	30 mL	7 mm	50-60 mm	12
PNB003	75 mm	100 mL	9 mm	90-110 mm	10
PNB004	90 mm	150 mL	10 mm	110-125 mm	10
PNB005	100 mm	200 mL	11 mm	110-125 mm	8
PNB006*	120 mm	400 mL	12 mm	125-150 mm	2
PNB007*	150 mm	750 mL	15 mm	150-180 mm	6

PNC - Short stem, plastic

Short stem, plastic

1| Made of autoclavable polypropylene (PP)
2| 60º cone angle and external surface with ribs

Code	Ø (cone)	L x Ø (stem)
PNC001	50 mm	50 x 7 mm
PNC002	75 mm	75 x 9 mm
PNC003	100 mm	95 x 9 mm
PNC004	150 mm	110 x 16 mm



PNF - Büchner, porcelain

Büchner, porcelain

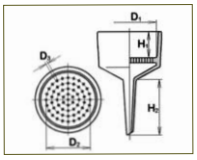
1| Used in vacuum filtration processes
2| With perforated plate to fit filtering paper
3| Glazed

Code	Cap.	Height (total)	int. Ø (total)	middle Ø (total)	Batch
PNF001	30 mL	70 mm	40 mm	13 mm	12
PNF002	50 mL	80 mm	50 mm	15 mm	12
PNF003	120 mL	125 mm	70 mm	20 mm	4
PNF004	200 mL	145 mm	95 mm	21 mm	4
PNF005	400 mL	165 mm	110 mm	26 mm	2
PNF006	600 mL	170 mm	125 mm	30 mm	2
PNF007	1000 mL	195 mm	135 mm	33 mm	--

page [233]

PNF - Büchner, porcelain

Büchner, porcelain



1| Used in vacuum filtration processes
2| With perforated plate to fit filtering paper
3| Glazed

Code	D1 mm	D2 mm	D3 mm	H1 mm	H2 mm	Capacity mL	Filter paper Ø mm
PNF008	48	38	1	24	43	35	45
PNF009	62	45	1	30	64	70	55
PNF010	77	58	1	35	64	120	70
PNF011	97	70	2	40	71	240	90
PNF012	116	95	2	49	83	400	110
PNF013	130	110	2	52	85	600	125
PNF014	156	130	2	59	96	1000	150
PNF015	192	160	2	74	117	2000	185
PNF016	248	220	2	90	117	4000	240
PNF017	296	270	2	105	130	7000	295
PNF018	334	300	2	120	133	10000	325

PNG - Büchner, glass

With sintered disc

1| Glass funnel with sintered disc poresity G0 to G4
2| Borosilicate glass
3| For other volumes and/or poresity, consult

Code	Capacity	Ø (disc)	Poresity
PNG004	35 mL	30 mm	G0
PNG005	35 mL	30 mm	G1
PNG006	35 mL	30 mm	G2
PNG007	35 mL	30 mm	G3
PNG008	35 mL	30 mm	G4
PNG009	80 mL	40 mm	G0
PNG010	80 mL	40 mm	G1
PNG011	80 mL	40 mm	G2
PNG012	80 mL	40 mm	G3
PNG013	80 mL	40 mm	G4
PNG014	200 mL	65 mm	G0
PNG015	200 mL	65 mm	G1
PNG016	200 mL	65 mm	G2
PNG017	200 mL	65 mm	G3
PNG018	200 mL	65 mm	G4
PNG019	500 mL	90 mm	G0
PNG020	500 mL	90 mm	G1
PNG021	500 mL	90 mm	G2
PNG022	500 mL	90 mm	G3
PNG023	500 mL	90 mm	G4
PNG024	1000 mL	120 mm	G0
PNG025	1000 mL	120 mm	G1
PNG026	1000 mL	120 mm	G2
PNG027	1000 mL	120 mm	G3
PNG028	1000 mL	120 mm	G4

page [234]

PNM - For transferring, plastic

For transferring

1| Autoclavable high density polyethylene (HDPE)
2| With rim and handle and external surface with ribs
3| Suitable product for food contact

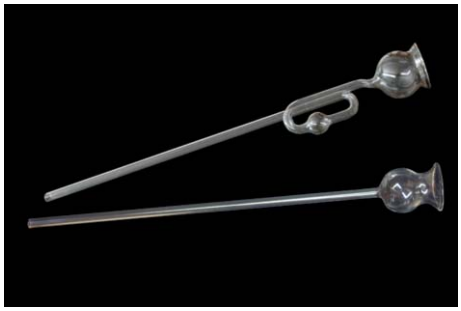
Code	Ø (cone)	L x Ø (stem)	Capacity
PNM010	80 mm	13 x 30 mm	100 mL
PNM011	110 mm	15 x 38 mm	300 mL
PNM012	130 mm	20 x 43 mm	450 mL
PNM013	140 mm	24 x 52 mm	750 mL
PNM014	180 mm	30 x 69 mm	1500 mL
PNM015	220 mm	35 x 81 mm	1750 mL
PNM016	260 mm	38 x 75 mm	4000 mL
PNM017	310 mm	43 x 80 mm	5500 mL
PNM018	400 mm	45 x 130 mm	10.000 mL

PNZ - others

Thistle funnel

1| They can be inserted in small holes of stoppers
2| It facilitates the addition of liquids to closed flasks
3| It prevents gas leaks produced in certain reactions

Code	Des.	Length	Funnel Ø	Stem Ø
PNZ002	Straight	300 mm	40 mm	8 mm
PNZ001	With 1 bulb	300 mm	40 mm	8 mm



PQB - Squibb

PTFE stopcock

1| Made of borosilicate glass, ground neck and polypropylene (PP) stopper

Code	Capacity	Ground
PQB001	50 mL	19/29
PQB002	100 mL	19/26
PQB003	125 mL	19/26
PQB005	250 mL	19/26
PQB006	250 mL	24/29
PQB004	250 mL	29/32
PQB008	500 mL	24/29
PQB007	500 mL	29/32
PQB009	1000 mL	29/32
PQB010	2000 mL	29/32

page [235]

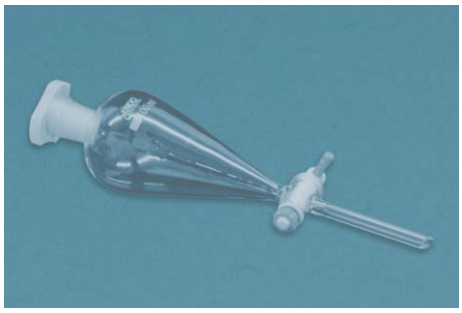
PQD - Gilson

Glass, PTFE stopcock

Code	Capacity	Ground
PQD001	50 mL	19/26
PQD002	100 mL	19/26
PQD003	125 mL	19/26
PQD004	250 mL	19/26
PQD005	250 mL	24/29
PQD006	250 mL	29/32
PQD007	500 mL	24/29
PQD008	1000 mL	29/32

PQL - Cylindrical

PTFE stopcock



Code	Capacity	Ground	Graduation
PQL001	25 mL	14/23	No
PQL002	250 mL	29/32	Yes

PSB - Standard

Filter paper, standard, characteristics

Type	Weight (g/m^2)	Thickness (mm)	pH	Humidity %	Dry resistance (kg) Longitudinal	Dry resistance (kg) Through	Wet resistance (kg) Longitudinal	Wet resistance (kg) Through	Porosity (µm)
Standard	77	0.16/0.18	7	6.8 ± 0.2	3.5/4.0 > 3.5	1.3/1.4 > 2.2	> 0.8	> 0.5	8-11

Code	Ø (mm)	Box of (uds)
Flat		
PSB001	55	100
PSB002	70	100
PSB003	90	100
PSB004	100	100
PSB005	130	100
PSB006	150	100
PSB007	185	100
PSB008	190	100
PSB009	250	100
PSB010	330	100
PSB011	400	100
PSB012	450	100
PSB013	500	100
Folded		
PSB014	70	100
PSB015	100	100
PSB016	130	100
PSB017	150	100
PSB018	190	100
PSB019	250	100
PSB020	330	100
PSB021	400	100
PSB022	450	100
PSB023	500	100
PSB024	650	100

page [236]

PSC - Qualitative, very slow

Filters FC29E

1| Very slow filtering speed
2| Extra though paper
3| Ideal for water solutions and volatile liquids such as alcohol, fuel, ether, etc.

FLAT Code	Ø (mm)	Pack	FOLDED Code	Ø (mm)	Pack
PSC001	25	100	PSC022	90	100
PSC002	40	100	PSC023	110	100
PSC003	55	100	PSC024	125	100
PSC004	70	100	PSC025	135	100
PSC005	90	100	PSC026	150	100
PSC006	110	100	PSC027	185	100
PSC007	125	100	PSC028	210	100
PSC008	135	100	PSC029	240	100
PSC009	150	100	PSC030	270	100
PSC010	185	100	PSC031	320	100
PSC011	210	100	PSC032	385	100
PSC012	240	100	PSC033	450	100
PSC013	270	100	PSC034	500	100
PSC014	320	100	PSC035	650	50
PSC015	385	100	PSC036	700	50
PSC016	450	100	PSC037	800	50
PSC017	500	100			
PSC018	650	50			
PSC019	700	50			
PSC020	800	50			
PSC021	900	50			

PSD - Qualitative, slow

Filters FC22L

1| Slow filtering speed
2| Dense texture of high retention. Ideal for vacuum filtration of injectable serum, etc.

FLAT Code	Ø (mm)	Pack	FOLDED Code	Ø (mm)	Pack
PSD001	25	100	PSD016	70	100
PSD002	40	100	PSD017	90	100
PSD003	55	100	PSD018	110	100
PSD004	70	100	PSD019	125	100
PSD005	90	100	PSD020	135	100
PSD006	110	100	PSD021	150	100
PSD007	125	100	PSD022	185	100
PSD008	135	100	PSD023	210	100
PSD009	150	100	PSD024	240	100
PSD010	185	100	PSD025	270	100
PSD011	210	100	PSD026	320	100
PSD012	240	100	PSD027	385	100
PSD013	270	100	PSD028	450	100
PSD014	320	100	PSD029	500	100
PSD015	385	100			

Characteristics Filters FC22L

Type	Weight (g/m²)	Thickness (mm)	Retention (µm)	Filtering speed (s)	Wet resistance
FC22L	85	0.20	3	100	Medium

page [237]

PSD - Qualitative, slow

Filters FC49L

1| Slow filtering speed
2| 150g/m2 paper of high retention and good strength
3| Ideal for biochemistry and pharmaceutical industry

FLAT Code	Ø (mm)	Pack
PSD032	25	100
PSD033	40	100
PSD034	55	100
PSD030	70	100
PSD031	90	100
PSD035	110	100
PSD036	125	100
PSD037	135	100
PSD038	150	100
PSD039	185	100
PSD040	210	100
PSD041	240	100
PSD042	270	100
PSD043	320	100
PSD044	385	100
PSD045	450	100
PSD046	500	100

FOLDED Code	Ø (mm)	Pack
PSD047	90	100
PSD048	110	100
PSD049	125	100
PSD050	135	100
PSD051	150	100
PSD052	185	100
PSD053	210	100
PSD054	240	100
PSD055	270	100
PSD056	320	100
PSD057	385	100
PSD058	450	100
PSD059	500	100

Characteristics Filters FC49L

Type	Weight (g/m²)	Thickness (mm)	Retention (µm)	Filtering speed (s)	Wet resistance
FC49L	150	0.40	2	180	Very good

PSF - Qualitative, medium

FILTRESRS

Filters FC28M

1| Medium filtering speed
2| Very high resistance even wet
3| Ideal for acid or alkaline solutions

FLAT Code	Ø (mm)	Pack
PSF067	25	100
PSF001	40	100
PSF002	55	100
PSF003	70	100
PSF004	90	100
PSF005	110	100
PSF006	125	100
PSF007	135	100
PSF008	150	100
PSF009	185	100
PSF010	210	100
PSF011	240	100
PSF012	270	100
PSF013	320	100
PSF014	385	100
PSF015	450	100
PSF016	500	100

FOLDED Code	Ø (mm)	Pack
PSF017	70	100
PSF018	90	100
PSF019	110	100
PSF020	125	100
PSF021	135	100
PSF022	150	100
PSF023	185	100
PSF024	210	100
PSF025	240	100
PSF026	270	100
PSF027	320	100
PSF028	385	100
PSF029	450	100
PSF030	500	100

Characteristics Filters FC28M

Type	Weight (g/m²)	Thickness (mm)	Retention (µm)	Filtering speed (s)	Wet resistance
FC28M	80	0.18	5	40	Very good

page [238]

PSF - Qualitative, medium

FILTRESRS

Filters FC20M

1| Medium filtering speed
2| Good retention capacity
3| Ideal for general applications and for education

FLAT Code	Ø (mm)	Pack	FOLDED Code	Ø (mm)	Pack
PSF031	25	100	PSF048	70	100
PSF032	40	100	PSF049	90	100
PSF033	55	100	PSF050	110	100
PSF034	70	100	PSF051	125	100
PSF035	90	100	PSF052	135	100
PSF036	110	100	PSF053	150	100
PSF037	125	100	PSF054	185	100
PSF038	135	100	PSF055	210	100
PSF039	150	100	PSF056	240	100
PSF040	185	100	PSF057	270	100
PSF041	210	100	PSF058	320	100
PSF042	240	100	PSF059	385	100
PSF043	270	100	PSF060	450	100
PSF044	320	100	PSF061	500	100
PSF045	385	100			
PSF046	450	100			
PSF047	500	100			

Characteristics Filters FC20M

Type	Weight (g/m²)	Thickness (mm)	Retention (µm)	Filtering speed (s)	Wet resistance
FC20M	77	0.13	5	40	Good

Filters FC75M

1| Medium filtering speed
2| Very pure paper
3| The most used type for qualitative analyses, phosphates, sugars, fertilizers

FLAT Code	Ø (mm)	Pack	FOLDED Code	Ø (mm)	Pack
PSF062	25	100	PSF080	70	100
PSF068	40	100	PSF081	90	100
PSF069	55	100	PSF082	110	100
PSF063	70	100	PSF083	125	100
PSF064	90	100	PSF084	135	100
PSF065	110	100	PSF085	150	100
PSF070	125	100	PSF086	185	100
PSF071	135	100	PSF087	210	100
PSF072	150	100	PSF088	240	100
PSF073	185	100	PSF089	270	100
PSF074	210	100	PSF090	320	100
PSF066	240	100	PSF091	385	100
PSF075	270	100	PSF092	450	100
PSF076	320	100	PSF093	500	100
PSF077	385	100			
PSF078	450	100			
PSF079	500	100			

Characteristics Filters FC75M

Type	Weight (g/m²)	Thickness (mm)	Retention (µm)	Filtering speed (s)	Wet resistance
FC75M	75	0.16	6	50	Medium

page [239]

PSG - Qualitative, fast

Filters FC27E

1| Fast filtering speed, extra soft thick paper
2| Ideal for the filtration of oils, syrups, fatty substances
3| Also used with Büchner funnels

FLAT Code	Ø (mm)	Pack	FOLDED Code	Ø (mm)	Pack
PSG001	25	100	PSG019	90	100
PSG002	40	100	PSG020	110	100
PSG003	55	100	PSG021	125	100
PSG004	70	100	PSG022	135	100
PSG005	90	100	PSG023	150	100
PSG006	110	100	PSG024	185	100
PSG007	125	100	PSG025	210	100
PSG008	135	100	PSG026	240	100
PSG009	150	100	PSG027	270	100
PSG010	185	100	PSG028	320	100
PSG011	210	100	PSG029	385	100
PSG012	240	100	PSG030	450	100
PSG013	270	100	PSG031	500	100
PSG014	320	100			
PSG015	385	100			
PSG016	450	100			
PSG017	500	100			

Characteristics Filters FC27E

Type	Weight (g/m²)	Thickness (mm)	Retention (µm)	Filtering speed (s)	Wet resistance
FC27E	160	0.45	8	120	Good

Filters FC26R

1| Fast filtering speed
2| Very pure paper
3| Ideal for the preparation and analysis of pharmaceutical products and metallurgical analyses.

FLAT Code	Ø (mm)	Pack	FOLDED Code	Ø (mm)	Pack
PSG034	25	100	PSG051	70	100
PSG035	40	100	PSG052	90	100
PSG036	55	100	PSG053	110	100
PSG037	70	100	PSG054	125	100
PSG038	90	100	PSG055	135	100
PSG039	110	100	PSG056	150	100
PSG040	125	100	PSG057	185	100
PSG041	135	100	PSG058	210	100
PSG042	150	100	PSG059	240	100
PSG043	185	100	PSG060	270	100
PSG044	210	100	PSG061	320	100
PSG045	240	100	PSG062	385	100
PSG046	270	100	PSG063	450	100
PSG047	320	100	PSG064	500	100
PSG048	385	100			
PSG049	450	100			
PSG050	500	100			

Characteristics Filters FC26R

Type	Weight (g/m²)	Thickness (mm)	Retention (µm)	Filtering speed (s)	Wet resistance
FC26R	75	0.15	10	30	Acceptable

page [240]

PSG - Qualitative, fast

Filters FC21R

1| Fast filtering speed
2| Very pure paper
3| Ideal for filtration of mucilaginous liquids

FLAT Code	Ø (mm)	Pack	FOLDED Code	Ø (mm)	Pack
PSG127	25	100	PSG143	70	100
PSG128	40	100	PSG144	90	100
PSG129	55	100	PSG145	110	100
PSG130	70	100	PSG146	125	100
PSG131	90	100	PSG147	135	100
PSG065	110	100	PSG148	150	100
PSG132	125	100	PSG149	185	100
PSG133	135	100	PSG150	210	100
PSG134	150	100	PSG151	240	100
PSG135	185	100	PSG152	270	100
PSG136	210	100	PSG153	320	100
PSG137	240	100	PSG154	385	100
PSG138	270	100	PSG155	450	100
PSG139	320	100	PSG156	500	100
PSG140	385	100			
PSG141	450	100			
PSG142	500	100			

Characteristics Filters FC21R

Type	Weight (g/m²)	Thickness (mm)	Retention (µm)	Filtering speed (s)	Wet resistance
FC21R	75	0.17	10	35	Medium

Filters FC150R

1| Fast filtering speed
2| 150 g/m² crepé paper
3| Ideal for filtration of loaded liquids

FLAT Code	Ø (mm)	Pack	Precio	FOLDED Code	Ø (mm)	Pack
PSG066	25	100		PSG080	90	100
PSG067	40	100		PSG081	110	100
PSG068	55	100		PSG082	125	100
PSG069	70	100		PSG083	135	100
PSG070	90	100		PSG084	150	100
PSG071	110	100		PSG085	185	100
PSG072	125	100		PSG086	210	100
PSG073	135	100		PSG087	240	100
PSG074	150	100		PSG088	270	100
PSG075	185	100		PSG089	320	100
PSG076	210	100		PSG090	385	100
PSG077	240	100		PSG091	450	100
PSG078	270	100		PSG092	500	100
PSG079	320	100				
PSG157	385	100				
PSG158	450	100				
PSG159	500	100				

Characteristics Filters FC150R

Type	Weight (g/m²)	Thickness (mm)	Retention (µm)	Filtering speed (s)	Wet resistance
FC150R	150	0.35	8	40	Very good

page [241]

PSG - Qualitative, fast

Filters FC25R

1| Fast filtering speed
2| Plain paper. Ideal for big volume precipitates

FLAT Code	Ø (mm)	Pack	FOLDED Code	Ø (mm)	Pack
PSG093	25	100	PSG110	70	100
PSG094	40	100	PSG111	90	100
PSG095	55	100	PSG112	110	100
PSG096	70	100	PSG113	125	100
PSG097	90	100	PSG114	135	100
PSG098	110	100	PSG115	150	100
PSG099	125	100	PSG116	185	100
PSG100	135	100	PSG117	210	100
PSG101	150	100	PSG118	240	100
PSG102	185	100	PSG119	270	100
PSG103	210	100	PSG120	320	100
PSG104	240	100	PSG121	385	100
PSG105	270	100	PSG122	450	100
PSG106	320	100	PSG123	500	100
PSG107	385	100			
PSG108	450	100			
PSG109	500	100			

Characteristics Filters FC25R

Type	Weight (g/m²)	Thickness (mm)	Retention (µm)	Filtering speed (s)	Wet resistance
FC25R	77	0.15	8	35	Medium

PSH - Qualitative, very fast

Filters FC75R

1| Very fast filtering speed
2| Very resistant crepé paper
3| Ideal for all kind of very fast filtrations

FLAT Code	Ø (mm)	Pack	FOLDED Code	Ø (mm)	Pack
PSH028	25	100	PSH014	70	100
PSH001	40	100	PSH015	90	100
PSH002	55	100	PSH016	110	100
PSH003	70	100	PSH017	125	100
PSH004	90	100	PSH018	135	100
PSH005	110	100	PSH019	150	100
PSH006	125	100	PSH020	185	100
PSH007	135	100	PSH021	210	100
PSH008	150	100	PSH022	240	100
PSH009	185	100	PSH023	270	100
PSH010	210	100	PSH024	320	100
PSH011	240	100	PSH025	385	100
PSH012	270	100	PSH026	450	100
PSH013	320	100	PSH027	500	100
PSH029	385	100			
PSH030	450	100			
PSH031	500	100			

Characteristics Filters FC75R

Type	Weight (g/m2)	Thickness (mm)	Retention (µm)	Filtering speed (s)	Wet resistance
FC75R	60	0.12	15	25	Good

page [242]

PSK - Quantitative, slow

Filters SCLO

1 | Slow filtering speed, dense texture
2 | Ideal for retention of fine precipitates

FLAT Code	Ø (mm)	Pack	FOLDED Code	Ø (mm)	Pack
PSK001	12	100	PSK014	70	100
PSK002	22	100	PSK015	90	100
PSK003	40	100	PSK016	110	100
PSK004	55	100	PSK017	125	100
PSK005	70	100	PSK018	135	100
PSK006	90	100	PSK019	150	100
PSK007	110	100	PSK020	185	100
PSK008	125	100	PSK021	210	100
PSK009	135	100	PSK022	240	100
PSK010	150	100			
PSK011	185	100			
PSK012	210	100			
PSK013	240	100			

Characteristics Filters SCLO

Type	Weight (g/m²)	Thickness (mm)	Retention (µm)	Filtering speed (s)	Wet resistance
SCLO	80	0.2	3	100	Medium

PSL - Quantitative, medium

Filters SCSG

1 | Medium filtration speed, without fats
2 | Medium texture
3 | Ideal for determination of fat content in the food industry

FLAT Code	Ø (mm)	Pack	Precio	FOLDED Code	Ø (mm)	Pack
PSL001	12	100		PSL014	70	100
PSL002	22	100		PSL015	90	100
PSL003	40	100		PSL016	110	100
PSL004	55	100		PSL017	125	100
PSL005	70	100		PSL018	135	100
PSL006	90	100		PSL019	150	100
PSL007	110	100		PSL020	185	100
PSL008	125	100		PSL021	210	100
PSL009	135	100		PSL022	240	100
PSL010	150	100				
PSL011	185	100				
PSL012	210	100				
PSL013	240	100				

Characteristics Filters SCSG

Type	Weight (g/m²)	Thickness (mm)	Retention (µm)	Filtering speed (s)	Wet resistance
SCSG	80	0.16	6	40	Medium

page [243]

PSL - Quantitative, medium

FILTRESRS

Filters SCMO

1| Medium filtration speed, medium texture
2| Ideal for all kind of gravimetric analyses

FLAT Code	Ø (mm)	Pack	FOLDED Code	Ø (mm)	Pack
PSL023	12	100	PSL036	70	100
PSL024	22	100	PSL037	90	100
PSL025	40	100	PSL038	110	100
PSL026	55	100	PSL039	125	100
PSL027	70	100	PSL040	135	100
PSL028	90	100	PSL041	150	100
PSL029	110	100	PSL042	185	100
PSL030	125	100	PSL043	210	100
PSL031	135	100	PSL044	240	100
PSL032	150	100			
PSL033	185	100			
PSL034	210	100			
PSL035	240	100			

Characteristics Filters SCMO

Type	Weight (g/m²)	Thickness (mm)	Retention (µm)	Filtering speed (s)	Wet resistance
SCMO	80	0.16	6	40	Medium

PSM - Quantitative, fast

Filters SCRO

1| Fast filtering speed
2| Loose texture
3| Ideal for metallurgic laboratories

FLAT Code	Ø (mm)	Pack	FOLDED Code	Ø (mm)	Pack
PSM001	12	100	PSM014	70	100
PSM002	22	100	PSM015	90	100
PSM003	40	100	PSM016	110	100
PSM004	55	100	PSM017	125	100
PSM005	70	100	PSM018	135	100
PSM006	90	100	PSM019	150	100
PSM007	110	100	PSM020	185	100
PSM008	125	100	PSM021	210	100
PSM009	135	100	PSM022	240	100
PSM010	150	100			
PSM011	185	100			
PSM012	210	100			
PSM013	240	100			

Characteristics Filters SCRO

Type	Weight (g/m²)	Thickness (mm)	Retention (µm)	Filtering speed (s)	Wet resistance
SCRO	80	0.16	10	25	Acceptable

page [244]

PSN - Quantitative, very fast

Filters SCTR

1 | Very fast filtering speed
2 | Loose texture
3 | Ideal for retention of thick precipitates such as metal hydrides

FLAT Code	Ø (mm)	Pack	FOLDED Code	Ø (mm)	Pack
PSN001	12	100	PSN014	70	100
PSN002	22	100	PSN015	90	100
PSN003	40	100	PSN016	110	100
PSN004	55	100	PSN017	125	100
PSN005	70	100	PSN018	135	100
PSN006	90	100	PSN019	150	100
PSN007	110	100	PSN020	185	100
PSN008	125	100	PSN021	210	100
PSN009	135	100	PSN022	240	100
PSN010	150	100			
PSN011	185	100			
PSN012	210	100			
PSN013	240	100			

Characteristics Filters SCTR

Type	Weight (g/m²)	Thickness (mm)	Retention (µm)	Filtering speed (s)	Wet resistance
SCTR	80	0.13	15	12	Acceptable

PSP - Glass fiber

Filters FV341

1 | Ideal for the control of atmospheric contamination

Code	Ø (mm)	Pack
PSP043	20	100
PSP044	21	100
PSP045	24	100
PSP046	25	100
PSP047	40	100
PSP048	45	100
PSP049	47	100
PSP050	55	100
PSP051	60	100
PSP052	70	100
PSP053	90	100
PSP054	110	100
PSP055	125	100
PSP056	130	100
PSP057	140	100
PSP058	150	100
PSP059	160	100
PSP060	185	100
PSP061	200	100
PSP062	210	100
PSP063	240	100

Characteristics Filters FV341

Type	Efficacy (%)	Weight g/m²	Thickness mm	Retention µM	Filtering speed (S)	Wet resistance (µm)
FV341	95	50	0.30	2	8	Good

page [245]

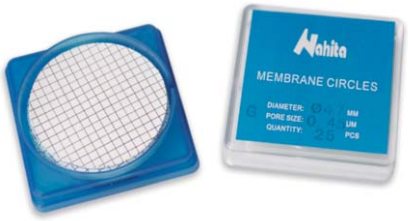
PSR - Membrane filters

Gridded sterile

1| Sterilized by gamma radiation
2| Supplied in individual bags

Code	Diameter	Pore	Box of (uds)
PSR001	47 mm	0.45 µm	50
PSR002	47 mm	0.80 µm	50

Gridded membranes



1| They have a printed grid on the surface that allows to make colony counts
2| Non sterile, autoclavables

Code	Diameter	Pore	Box of (uds)
PSR013	13 mm	0.22 µm	100
PSR014	13 mm	0.45 µm	100
PSR015	13 mm	0.80 µm	100
PSR016	25 mm	0.22 µm	100
PSR017	25 mm	0.45 µm	100
PSR018	25 mm	0.80 µm	100
PSR019	47 mm	0.22 µm	25
PSR020	47 mm,	0.45 µm	25
PSR021	47 mm	0.80 µm	25

Membrane filters

Code	Diameter	Pore	Box of (uds)
PSR003	13 mm	0.22 µm	200
PSR004	13 mm	0.45 µm	200
PSR005	13 mm	0.80 µm	200
PSR006	25 mm	0.22 µm	200
PSR007	25 mm	0.45 µm	200
PSR008	25 mm	0.80 µm	200
PSR009	47 mm	0.22 µm	50
PSR010	47 mm	0.45 µm	50
PSR011	47 mm	0.80 µm	50
PSR012	142 mm	0.80 µm	50

page [246]

Nylon

Code	Diameter	Pore	Box of (uds)
PSR022	25 mm	0,20 µm	100
PSR023	25 mm	0,45 µm	100
PSR024	47 mm	0,20 µm	100
PSR025	47 mm	0,45 µm	100

PSR - Membrane filters

Cellulose acetate

Code	Diameter	Pore	Box of (uds)
PSR026	25 mm	0,20 µm	100
PSR027	25 mm	0,45 µm	100
PSR028	47 mm	0,20 µm	100
PSR029	47 mm	0,45 µm	100

Cellulose nitrate sterile

Code	Diameter	Pore	Type	Units/box
PSR033	47 mm	0,20 µm	White, black grid	100
PSR032	47 mm	0,45 µm	White, black grid	100
PSR030	47 mm	0,20 µm	Black, white grid	100
PSR031	47 mm	0,45 µm	Black, white grid	100

Cellulose nitrate

Code	Diameter	Pore	Box of (uds)
PSR034	25 mm	0,20 µm	100
PSR035	25 mm	0,45 µm	100
PSR036	47 mm	0,20 µm	100
PSR037	47 mm	0,45 µm	100

Polyethersulfone

Code	Diameter	Pore	Box of (uds)
PSR038	25 mm	0,20 µm	100
PSR039	25 mm	0,45 µm	100
PSR040	47 mm	0,20 µm	100
PSR041	47 mm	0,45 µm	100

page [247]

PTFE

Code	Diameter	Pore	Box of (uds)
PSR042	25 mm	0,20 µm	100
PSR043	25 mm	0,45 µm	100
PSR044	47 mm	0,20 µm	100
PSR045	47 mm	0,45 µm	100

PSR - Membrane filters

Regenerated cellulose

Code	Diameter	Pore	Box of (uds)
PSR046	25 mm	0,20 µm	100
PSR047	25 mm	0,45 µm	100
PSR048	47 mm	0,20 µm	100
PSR049	47 mm	0,45 µm	100

Gridded sterile

Material	Ø 25 mm		Ø 47 mm	
	0.20 µm	0.45 µm	0.20 µm	0.45 µm
Cellulose nitrate	PSR034	PSR035	PSR036	PSR037
Sterile cellulose nitrate			PSR033 (BCN)	PSR032 (BCN)
			PSR030 (NCB)	PSR031 (NCB)
Cellulose acetate	PSR026	PSR027	PSR028	PSR029
Regenerated acetate	PSR046	PSR047	PSR048	PSR049
Nylon	PSR022	PSR023	PSR024	PSR025
Polietersulfona	PSR038	PSR039	PSR040	PSR041
PTFE	PSR042	PSR043	PSR044	PSR045

PSX - Reams

Reams

Code	Paper type	Weight	Dimensions	Ream of
PSX001	Joseph paper	25 g/m²	15x15 cm	500 sheets
PSX002	Joseph paper	25 g/m²	35x50 cm	500 sheets
PSX003	Joseph paper	25 g/m²	35x50 cm	800 sheets
PSX007	White paper 7 Kg	67 g/m²	40/42x52 cm	500 sheets
PSX005	White paper 7 Kg	77 g/m²	52x52 cm	500 sheets
PSX004	Grey paper	60 g/m²	42x52 cm	500 sheets
PSX006	Qualitative paper	77 g/m²	58x65 cm	100 sheets

page [248]

PSZ - Otros

Cytocentrifugation

Nahita

1| Cotton fiber cardboard paper
2| Very thick (420 g/m2), very absorbent
3| Used in juice extractions and centrifuges

Code	Dimensions (mm)	Box of
PSZ001	75 x 25	200

PSZ - Others

Antibiotics test

Code	Dimensions (mm)	Box of
PSZ002	6	1000 discos
PSZ003	9	1000 discos
PSZ004	12	1000 discos
PSZ005	13	1000 discos

Nitrogen free

Code	Dimensions (mm)	Box of
PSZ006	120 x 120	200

Phase separation

Code	Dimensions (mm)	Box of
PSZ007	90	100
PSZ008	110	100
PSZ009	125	100
PSZ010	150	100
PSZ011	185	100
PSZ012	210	100
PSZ013	240	100
PSZ014	270	100

Germination test

Code	Dimensions (mm)	Box of
PSZ018	85 x 120	500
PSZ015	100 x 200	500
PSZ016	30 x 200	1000
PSZ017	440 x 680	250
PSZ019	Ø. 85	100

page [249]

PVB - Cellulose acetate/nitrate

Cellulose acetate

1 | Box of 500 units

Code Ø 13 mm	Pore (µm)	Colour	Code Ø 25 mm	Pore (µm)	Colour
PVB001	0,20	Blue	PVB006	0,20	Blue
PVB002	0,45	Yellow	PVB007	0,45	Yellow
PVB003	0,80	Green	PVB008	0,80	Green
PVB004	1,20	Red	PVB009	1,20	Red
PVB005	5	Brown	PVB010	5	Brown

Cellulose acetate sterile

1 | Box of 500 units

Code Ø 13 mm	Pore (µm)	Colour	Code Ø 25 mm	Pore (µm)	Colour
PVB011	0,20	Blue	PVB016	0,20	Blue
PVB012	0,45	Yellow	PVB017	0,45	Yellow
PVB013	0,80	Green	PVB018	0,80	Green
PVB014	1,20	Red	PVB019	1,20	Red
PVB015	5	Brown	PVB020	5	Brown

Cellulose acetate (PP crankcase)

1 | Box of 500 units

Code Ø 13 mm	Pore (µm)	Code Ø 25 mm	Pore (µm)
PVB021	0,20	PVB026	0,20
PVB022	0,45	PVB027	0,45
PVB023	0,80	PVB028	0,80
PVB024	1,20	PVB029	1,20
PVB025	5	PVB030	5

page [250]

Regenerated cellulose

1 | Box of 500 units

Code Ø 13 mm	Pore (µm)	Code Ø 25 mm	Pore (µm)
PVB031	0,20	PVB033	0,20
PVB032	0,45	PVB034	0,45

PVZ - Others

Nylon

1 | Box of 500 units

Code Ø 13 mm	Pore (µm)	Code Ø 25 mm	Pore (µm)
PVZ001	0,20	PVZ003	0,20
PVZ002	0,45	PVZ004	0,45

Polyethersulfone

1 | Box of 500 units

Code Ø 13 mm	Pore (µm)	Code Ø 25 mm	Pore (µm)
PVZ005	0,20	PVZ007	0,20
PVZ006	0,45	PVZ008	0,45

PTFE

1 | Box of 500 units.

Code Ø 13 mm	Pore (µm)	Code Ø 25 mm	Pore (µm)
PVZ009	0,20	PVZ011	0,20
PVZ010	0,45	PVZ012	0,45

page [251]

Glass fiber

Ø 25 mm	Pore (µm)	Box of
PVZ013	0,70	500
PVZ014	1	500
PVZ015	1,2	500
PVZ016	3,10	500

PXB - Membrane pumps

Membrane pumps

1| Oil free, they don´t need water, thus, they don´t produce any waste water
2| They are provided with an analogic metallic manometer

Code	PXB001	PXB002
Vacuum pressure	638 mm Hg (Torr)/ 0.085 MP / 850 mbar	600 mm Hg (Torr)/ 0.08 MP / 800 mbar
Flow	10 L/min - 0.6 m3/h	25 L/min - 1.5 m3/h
Consumption	20 W	40 W
Weight	4 Kg	7 Kg
Dimensions	245 x 135 x 245 mm	280 x 140 x 220 mm
Power supply	220-240v 50hz	220-240v 50hz

PXL - Water jet pumps

Water jet pump

1| Minimum water pressure 4 kg/cm^2
2| Approximate vacuum of 17 mmHg

Code	Length	Upper Ø	Hose Ø
PXL001	320 mm	18 mm	10 mm

PZB - Chromatography

Chromatography paper

Code	Dimensions (mm)	Box of
PZB006	100 x 300	100 sheets
PZB003	200 x 200	100 sheets
PZB004	250 x 250	100 sheets
PZB005	285 x 250	25 sheets
PZB007	460 x 570	100 sheets
PZB008	580 x 600	100 sheets

page [252]