

# Technical data sheet **Rotavapor® R-80**

The Rotavapor® R-80 is a high-quality rotary evaporator to meet the essential needs in classical laboratory applications. The central tunable interface presents all distillation parameters at a glance and a smooth manual lift together with a cable-free, movable bath ensures reliable, quick and ergonomic positioning of the evaporating flask.



## Scope of delivery

All configurations are supplied ready to use.



The scope of delivery depends on the configuration of the purchase order.

Accessories are delivered as per the purchase order, order confirmation, and delivery note.

Components	Rotavapor® with glass assembly	Rotavapor® without glass assembly	Rotavapor® with vacuum solution
Rotavapor® R-80	1	1	1
Heating Bath R-80	1	1	1
Condenser (according to order code)	1	-	1
Vapor duct (with Combi-Clip)	1	1	1
Vacuum seal (VS22)	1	1	1
Evaporating flask (max. 1 L)	-	-	-
Receiving flask (1 L)	1	-	1
Woulff bottle	-	-	1
Set of required cooling/vacuum tubes and connectors	1	-	1
Power cable	1	1	1
Interface I-80 / I-180 (Vacuum Interface)	-	-	1
Vacuum Pump V-80 / V-180	-	-	1

## Order code

Choose the configuration according to your needs:

1 1 S R 0 8 0	0
Standard Joint	
1 SJ 29/32 vapor duct	
2 SJ 24/40 vapor duct	
Glass assembly	
V small Vertical P+G, incl. receiving flask 1000 mL P+G, excl. evaporating flask	
C small	
Cold trap P+G-LT, incl. receiving flask 1000 mL P+G-LT, excl. evaporating flask	
N Without	
Vacuum solution	
0 Without	
1 V-80 solution	
incl. Woulff bottle, Vacuum Pump V-80, Interface I-80 for manual vacuum control	
2 V-180 solution	
incl. Woulff bottle, Vacuum Pump V-180, Interface I-180 for automatic vacuum control	l
Voltage	

- Voltage \_\_\_\_\_ 1 220 – 240 V
- 2 100 120 V

## Technical data

## Rotavapor® R-80

Specification	Value
Dimensions ( $W \times D \times H$ )	345 mm × 315 mm × 590 mm
Dimensions (W $\times$ D $\times$ H) with V condenser and power plug	430 mm × 360 mm × 705 mm
Weight with condenser	9 kg
Connection voltage	100 – 120 VAC ± 10% 220 – 240 VAC ± 10%
Frequency	50 / 60 Hz
Power consumption	1,150 W
Fuse	T 12.5 A H 250 V (100 – 120 V) T 6.3 A H 250 V (220 – 240 V)
Overvoltage category	II
IP Code	IP42
Pollution degree	2
Minimum clearance on all sides	none
Display type	3" Dark segment display
Heating power	1,000 W
High temperature cut-out	140 °C
Heating bath temperature range	Up to 95 °C
Heating bath adjustment accuracy	±1°C
Heating bath regulation precision	±2 °C
Heating bath inner diameter	175 mm
Heating bath capacity	2 L
Heating bath fluid	Water
Typical heating-up time (20°C to 95°C)	14 min
Max. flask size	1,000 mL
Max. flask capacity	800 g
Immersion angle	20 – 50°
Rotation speed range	10 – 330 rpm
Adjustable lift height	180 mm
Cooling surface (V condenser)	1,280 cm <sup>2</sup>
Cooling temperature display range	-99 – 99 °C
Certificate	CB, CE, UL / CSA

## Ambient conditions

For indoor use only.

Specification	Value
Max. altitude above sea level	2,000 m
Ambient and storage temperature	5 – 40 °C

#### Specification

Max. relative humidity

#### Value

80% for temperatures up to 31 °C decreasing linearly to 50% relative humidity at 40 °C

## Spare parts and accessories

Use only genuine BUCHI consumables and spare parts in order to ensure correct, safe and reliable operation of the system.



#### NOTE

Any modifications of spare parts or assemblies are only allowed with the prior written permission of BUCHI.

#### Spare parts

	Order no.	Image
Aeration cap	046574	
Flange nut with pressure spring	11062387	
Ball joint clamp. For BJ 35/20	003275	$\frown$
To fasten receiving flask on condenser/secondary condenser.		
Lid. For C condenser	11075812	
Drain sleeve, set 5 pcs.	028606	
Navigation control knob	11074581	
Sliding ring	032005	
Encircles the installed vapor duct.		

	Order no.	Image
Base R-80 100 – 120 V, complete	11080626	
Base R-80 220 – 240 V, complete	11080627	
Tower R-80, complete	11080628	
Interface R-80, complete	11080629	
Rotary drive arm R-80, complete	11080630	
Heating bath R-80 100 – 120 V, complete	11080631	
Heating bath R-80 220 – 240 V, complete	11080632	
Cable and tubing fixtures. Set. 3 pcs. Content: Rubber strips, screws	11080633	
Combi-Clip Combi-Clip with snap lock mechanism to fasten evaporating flask on vapor duct. Vapor duct not included.	11075539	

	Order no.	Image
Beaker fastener, Connection with bayonet mount, for 500 mL For beaker flask 500 mL	11059810	
Sieve for cooling water valve, Ø18 mm	011514	
Woulff bottle holder	11075161	
Receiving vessel, GL 40, 125 mL, P+G For Woulff bottle	047233	
Fuses, set. 10 pcs. T 12.5A H 250V (100 – 120 V), 20 mm, Ø5 mm	047939	
Fuses, set. 10 pcs. T 6.3A H 250V (220 – 240 V), 20 mm, Ø5 mm	11075587	

# Wear parts

## Vacuum seal

	Order no.	Image
Vacuum seal VS 22, PTFE base, NBR O-ring, FDA compliant	11075810	

## Seals

	Order no.	Image
Seals, set. 10 pcs, for hose barbs GL 14, EPDM, black	040029	
Seals, set. 10 pcs, for hose barbs GL 14, FPM, green	040040	
Seals, set. 10 pcs, for hose barbs GL 14, silicone, red	040023	
Seal Woulff bottle	047165	

## Hose barbs

	Order no.	Image
Hose barb, bent, GL 14, incl. silicone seal	018916	
Hose barbs, set. 2 pcs, bent (1), straight (1), GL 14, silicone seal Content: Hose barbs, cap nuts, seals	041939	CONDERSE OF
Hose barbs, set. 3 pcs, bent, GL 14, silicone seal Content: Hose barbs, seals.	041987	and on
Hose barbs, set. 4 pcs, bent GL 14, silicone seal Content: Hose barbs, cap nuts, seals	037287	

	Order no.	Image
Hose barbs, set. 4 pcs, bent, GL 14, EPDM seal Content: Hose barbs, cap nuts, seals.	043129	
Hose barbs, set. 4 pcs, bent, GL 14, FPM seal Content: Hose barbs, cap nuts, seals.	040295	
Hose barbs, set. 4 pcs, straight, GL 14, EPDM seal Content: Hose barbs, cap nuts, seals.	043128	
Hose barbs, set. 4 pcs, straight, GL 14, FPM seal Content: Hose barbs, cap nuts, seals.	040296	
Hose barbs, set. 4 pcs, straight, GL 14, silicone seal Content: Hose barbs, cap nuts, seals	037642	
Hose barbs, set. 6 pcs, bent (4), straight (2), GL 14, silicone seal Content: Hose barbs, cap nuts, seals.	038000	

# Miscellaneous wear parts

	Order no.	Image
Cap nuts, set. 10 pcs, screw cap with hole, GL 14	041956	000000 00000
Screw caps, set. 5 pcs, closed with PTFE seal, GL 14	040624	

# Glass parts

#### Condenser

	Order no.	Image
Condenser C mini. Cold trap, 450 cm², 35° tilt angle, P+G-LT, incl. lid	11075732	
Condenser V mini. Vertical condenser, 1280 cm², 35° tilt angle, P+G	11075730	

# Vapor duct

	Order no.	Image
Vapor duct	11075727	
For V/C cond., Ø22 mm, SJ 24/40, incl. Combi-Clip		
Vapor duct For V/C cond., Ø22 mm, SJ 29/32, incl. Combi-Clip	11075728	

# Evaporating flask

	Order no.	Image
Evaporating flask Glass, SJ 24/40, 50 mL	008750	
Evaporating flask Glass, SJ 24/40, 100 mL	008751	
Evaporating flask Glass, SJ 24/40, 250 mL	008754	

Evaporating flask   008758     Glass, SJ 24/40, 500 mL   000440     Evaporating flask   000440     Glass, SJ 24/40, 1000 mL   000440     Evaporating flask   000431     Glass, SJ 29/32, 50 mL   000432     Evaporating flask   000432     Glass, SJ 29/32, 100 mL   000433     Evaporating flask   000433     Glass, SJ 29/32, 250 mL   000433     Evaporating flask   000433     Glass, SJ 29/32, 250 mL   000433     Evaporating flask   000433     Glass, SJ 29/32, 250 mL   000434     Evaporating flask   000434     Glass, SJ 29/32, 250 mL   000434	Order no.	Image
Glass, SJ 24/40, 1000 mL   Image: Constraint of the second seco	008758	
Glass, SJ 29/32, 50 mL   Image: Constraint of the second	000440	
Glass, SJ 29/32, 100 mL   Image: Constraint of the second secon	000431	
Glass, SJ 29/32, 250 mL   Evaporating flask   Glass, SJ 29/32, 500 mL   Evaporating flask   000434   Image: Comparison of the second se	000432	
Glass, SJ 29/32, 500 mL Evaporating flask 000435	000433	
	000434	
	000435	

# Drying flask

	Order no.	Image
Drying flask	011579	
Glass, SJ 24/40, 500 mL		
With 4 indents for better mixing/drying.		

	Order no.	Image
Drying flask Glass, SJ 24/40, 1000 mL With 4 indents for better mixing/drying.	000420	
Drying flask Glass, SJ 29/32, 500 mL With 4 indents for better mixing/drying.	000452	
Drying flask Glass, SJ 29/32, 1000 mL With 4 indents for better mixing/drying.	000453	

## Beaker flask

	Order no.	Image
Beaker flask, Drying, bayonet type, flat bottom, SJ 24/40, 500 mL Bayonet mount type Ø75 mm. With 4 indents for better mixing/ drying. Working volume 150 mL. Content: 1 coupling piece, 1 seal, 1 flask and 1 beaker fastener.	11063159	
Beaker flask, Evap., bayonet type, flat bottom, SJ 24/40, 500 mL Bayonet mount type Ø75 mm. Working volume 150 mL. Content: 1 coupling piece, 1 seal, 1 flask and 1 beaker fastener.	11063155	
Beaker flask, Drying, bayonet type, flat bottom, SJ 29/32, 500 mL Bayonet mount type Ø75 mm. With 4 indents for better mixing/ drying. Working volume 150 mL. Content: 1 coupling piece, 1 seal, 1 flask and 1 beaker fastener.	11063158	
Beaker flask, Evap., bayonet type, flat bottom, SJ 29/32, 500 mL Bayonet mount type Ø75 mm. Working volume 150 mL. Content: 1 coupling piece, 1 seal, 1 flask and 1 beaker fastener.	11063154	

# Receiving flask

	Order no.	Image
Receiving flask Glass, BJ 35/20, 500 mL	000424	
Receiving flask Glass, BJ 35/20, 500 mL, P+G	025264	
Receiving flask Glass, BJ 35/20, 500 mL, P+G-LT Application temperature: -70 to 40 °C.	040774	
Receiving flask Glass, BJ 35/20, 1000 mL, P+G	020728	
Receiving flask Glass, BJ 35/20, 1000 mL, P+G-LT Application temperature: -70 to 40 °C.	040775	

# Bump trap adapter

	Order no.	Image
Bump trap adapter Glass, Reitmeyer, SJ 24/40, 150 mm	036577	
Bump trap adapter Glass, SJ 24/40, 175 mm	11056919	
Bump trap adapter Glass, Reitmeyer, SJ 29/32, 135 mm	036576	

	Order no.	Image
Bump trap adapter Glass, SJ 29/32, 160 mm	11056920	

#### Accessories

	Order no.	Image
Woulff bottle, 125 mL, P+G, incl. holder	11075622	<u> </u>
For trapping particles and droplets and for pressure equalization.		
Cooling water valve, 24 VAC	031356	8 (
Valve opens cooling water feed during distillation.		
Cooling water temperature sensor	11075306	DOTE CO
Flask holder, EPDM, slip free	048618	
Holder for round-bottom flasks (50 – 5000 mL)		There Build
Flask holders, set. 5 pcs, EPDM, slip free	11059916	
Holder for round-bottom flasks (50 – 5000 mL)		
Heating bath balls, 450 pcs, PP, Ø10 mm	036405	
To reduce energy consumption of heating bath and for less evap- oration of the heating medium. For temperatures up to 100°C.		
Tubing, synthetic rubber, Ø6/13 mm, black, per m	11063244	~
Use: Vacuum		0
Tubing, silicone, Ø6/9 mm, transparent, per m	004133	$\sim$
Use: Cooling media		0



11594492A en Rotavapor® R-80 04.2024 Technical data are subject to change without notice Quality Systems ISO 9001

We are represented by more than 100 distribution partners worldwide. Find your local representative at:

# www.buchi.com

Quality in your hands