

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.



NOTE

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

Voltage

- 1 220 – 240 V
- 2 100 – 120 V

Technical data

Rotavapor® R-80

| Specification | Value |
|--|---|
| Dimensions (W × D × H) | 345 mm × 315 mm × 590 mm |
| Dimensions (W × D × 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 ² |
| 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**Value**

Max. relative humidity

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.

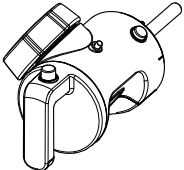
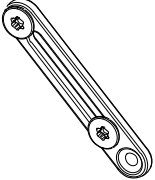
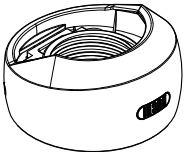


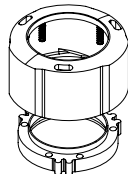
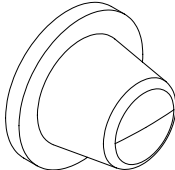
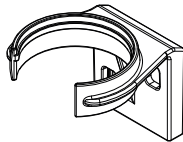
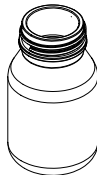
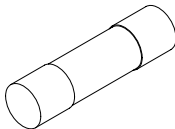
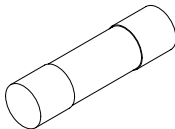
NOTE

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

Spare parts

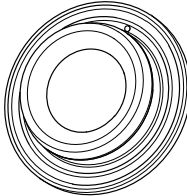
| | Order no. | Image |
|---|-----------|-------|
| Aeration cap | 046574 | |
| Flange nut with pressure spring | 11062387 | |
| Ball joint clamp. For BJ 35/20 To fasten receiving flask on condenser/secondary condenser. | 003275 | |
| Lid. For C condenser | 11075812 | |
| Drain sleeve, set 5 pcs. | 028606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

| | 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 |  |

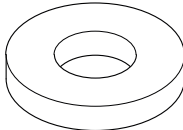

| | Order no. | Image |
|---|-----------|---|
| Beaker fastener, Connection with bayonet mount, for 500 mL For beaker flask 500 mL | 11059810 |  |
| Sieve for cooling water valve, Ø18 mm | 011514 |  |
| Woulff bottle holder | 11075161 |  |
| Receiving vessel, GL 40, 125 mL, P+G For Woulff bottle | 047233 |  |
| 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

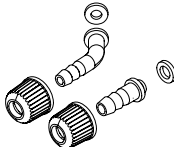
Vacuum seal

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

Seals

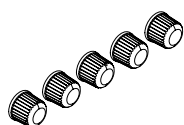
| | Order no. | Image |
|---|-----------|---|
| Seals, set. 10 pcs, for hose barbs GL 14, EPDM, black | 040029 |  |
| Seals, set. 10 pcs, for hose barbs GL 14, FPM, green | 040040 |  |
| Seals, set. 10 pcs, for hose barbs GL 14, silicone, red | 040023 |  |
| Seal Woulff bottle | 047165 |  |

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 |  |
| Hose barbs, set. 3 pcs, bent, GL 14, silicone seal Content: Hose barbs, seals. | 041987 |  |
| 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 |  |
| Screw caps, set. 5 pcs, closed with PTFE seal, GL 14 | 040624 |  |

Glass parts

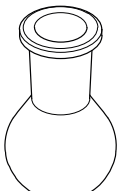
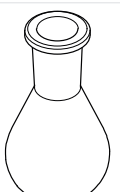

Condenser

| | Order no. | Image |
|---|-----------|---|
| Condenser C mini. Cold trap, 450 cm ² , 35° tilt angle, P+G-LT, incl. lid | 11075732 |  |
| Condenser V mini. Vertical condenser, 1280 cm ² , 35° tilt angle, P+G | 11075730 |  |

Vapor duct

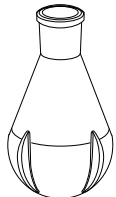
| | Order no. | Image |
|---|-----------|--|
| Vapor duct For V/C cond., Ø22 mm, SJ 24/40, incl. Combi-Clip | 11075727 |  |
| Vapor duct For V/C cond., Ø22 mm, SJ 29/32, incl. Combi-Clip | 11075728 |  |

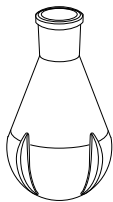
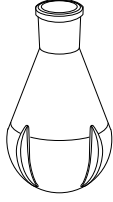
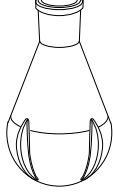
Evaporating flask

| | 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 |  |

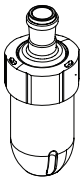
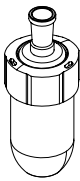
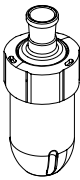
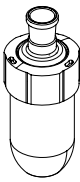
| | Order no. | Image |
|---|-----------|---|
| Evaporating flask Glass, SJ 24/40, 500 mL | 008758 |  |
| Evaporating flask Glass, SJ 24/40, 1000 mL | 000440 |  |
| Evaporating flask Glass, SJ 29/32, 50 mL | 000431 |  |
| Evaporating flask Glass, SJ 29/32, 100 mL | 000432 |  |
| Evaporating flask Glass, SJ 29/32, 250 mL | 000433 |  |
| Evaporating flask Glass, SJ 29/32, 500 mL | 000434 |  |
| Evaporating flask Glass, SJ 29/32, 1000 mL | 000435 |  |

Drying flask

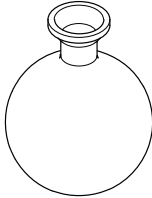
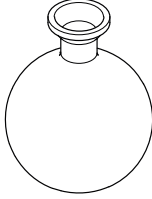
| | Order no. | Image |
|---|-----------|---|
| Drying flask Glass, SJ 24/40, 500 mL With 4 indents for better mixing/drying. | 011579 |  |

| | 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 |  |

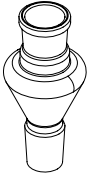
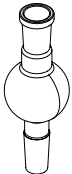
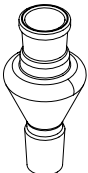
Beaker flask

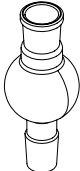
| | Order no. | Image |
|---|-----------|---|
| Beaker flask, Drying, bayonet type, flat bottom, SJ 24/40, 500 mL Bayonet mount type Ø75 mm. With 4 indents for better mixing/drying. Working volume 150 mL. Content: 1 coupling piece, 1 seal, 1 flask and 1 beaker fastener. | 11063159 |  |
| Beaker flask,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

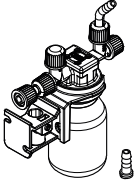
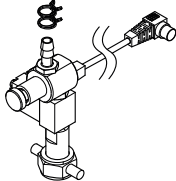
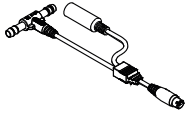
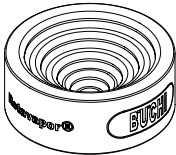

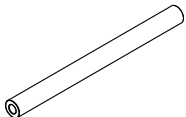
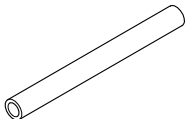
| | Order no. | Image |
|---|-----------|---|
| Receiving flask Glass, BJ 35/20, 500 mL | 000424 |  |
| Receiving flask Glass, BJ 35/20, 500 mL, P+G | 025264 |  |
| Receiving flask Glass, BJ 35/20, 500 mL, P+G-LT Application temperature: -70 to 40 °C. | 040774 |  |
| Receiving flask Glass, BJ 35/20, 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 For trapping particles and droplets and for pressure equalization. | 11075622 |  |
| Cooling water valve, 24 VAC Valve opens cooling water feed during distillation. | 031356 |  |
| Cooling water temperature sensor | 11075306 |  |
| Flask holder, EPDM, slip free Holder for round-bottom flasks (50 – 5000 mL) | 048618 |  |
| Flask holders, set. 5 pcs, EPDM, slip free Holder for round-bottom flasks (50 – 5000 mL) | 11059916 |  |
| Heating bath balls, 450 pcs, PP, Ø10 mm To reduce energy consumption of heating bath and for less evaporation of the heating medium. For temperatures up to 100°C. | 036405 | |
| Tubing, synthetic rubber, Ø6/13 mm, black, per m Use: Vacuum | 11063244 |  |
| Tubing, silicone, Ø6/9 mm, transparent, per m Use: Cooling media | 004133 |  |



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
