

SACO1000

Nitrogen Sample Concentrator with Water Bath • RT+5 °C to 99 °C • 12 Positions • Tubes Ø 10 mm to Ø 29 mm

SACO1000 Nitrogen Sample Concentrator evaporates solvent from 12 tubes in a stainless steel water bath: the water warms the samples gently and evenly while nitrogen from stainless steel needles sweeps the vapour off the liquid surface. The bath is controlled from RT+5 °C to 99 °C with an accuracy of $\leq \pm 1$ °C. A spring-loaded holder takes tubes from Ø 10 mm to Ø 29 mm with 1 mL to 50 mL of liquid, so different tubes can stand side by side in one run. Every needle has its own valve and is raised or lowered on its own, a flow meter shows the gas flow, and a level sensor gives an alarm before the bath runs dry.

NITROGEN BLOW-DOWN

WATER BATH

RT+5 °C TO 99 °C

$\leq \pm 1$ °C

12 NUMBERED POSITIONS

TUBES Ø 10–29 MM

VALVE ON EVERY NEEDLE

FLOW METER

DRY-RUN ALARM

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Product: **SACO1000 Nitrogen Sample Concentrator with water bath**

SKU: **PRO4674**

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 **HEATING ONLY** RT+5 °C to 99 °C



SACO1000 • water bath, 12 needles and controller with flow meter



Needle ring • every needle with its own valve and height setting

MODEL

SACO1000 • PRO4674

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SACO1000 • technical specification

Nitrogen sample concentrator with water bath, RT+5 °C to 99 °C, 12 positions, tubes Ø 10 mm to Ø 29 mm, a valve on every needle, flow meter

RT+5 °C TO 99 °C

± 1 °C

12 POSITIONS

Ø 10-29 MM TUBES

1-50 ML

N₂ UP TO 15 L/MIN

— Gentle heat from a water bath

Product Overview

Application profile

Larger volumes: up to 50 mL per tube, in tubes up to Ø 29 mm.

Mixed tubes: different diameters in one run, without changing a block.

Heat-sensitive samples: gentle, even heat from water below 100 °C.

Residue and environmental analysis: extracts before GC and LC.

Solvent exchange: evaporation to near dryness and reconstitution in another solvent.

Key features

Control: LCD controller with temperature and time setting.

Temperature: RT+5 °C to 99 °C, resolution 0.1 °C.

Heating: 40 °C to 99 °C in ≤ 30 min.

Timer: 1 min to 99 h 59 min, or continuous.

Needle ring: 12 needles, each with a valve and its own height; travel 200 mm.

Holder: 12 numbered positions with spring clips and a support tray.

Gas: flow meter with needle valve; connection for Ø 8 mm hose.

Build: corrosion-resistant parts, stainless steel bath, easy to clean.

Why a water bath

Even heat: water surrounds every tube, whatever its shape.

One holder for all tubes: spring clips grip Ø 10 mm to Ø 29 mm.

Each sample on its own: valve and height are set needle by needle.

Flow in view: a flow meter on the controller shows the nitrogen flow.

Protected: a level sensor gives an alarm before the bath runs dry.

Core technical summary

Parameter	Specification
Model	SACO1000
Product type	Nitrogen sample concentrator, water bath
Temperature control range	RT+5 °C to 99 °C
Accuracy	≤ ±1 °C
Uniformity	≤ ±1 °C at 60 °C
Heating 40 °C to 99 °C	≤ 30 min
Positions	12, numbered
Tubes	Ø 10 mm to Ø 29 mm · 1 mL to 50 mL
Nitrogen flow	up to 15 L/min

TEMP. CONTROL

RT+5 °C to 99 °C

ACCURACY

≤ ±1 °C

POSITIONS

12

TUBES

Ø 10-29 mm

RT = room temperature. Nitrogen supply, pressure regulator, tubes and samples are not part of the instrument. Fill the bath with water before heating. Use in a fume hood. Suitability for a specific method is confirmed in the COLO.Science quotation.

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Technical Specifications

Parameter	SACO1000	Parameter	SACO1000
Temperature control range	RT+5 °C to 99 °C	Tube diameter	Ø 10 mm to Ø 29 mm
Temperature accuracy	≤ ±1 °C	Liquid volume	1 mL to 50 mL
Temperature uniformity	≤ ±1 °C at 60 °C	Nitrogen flow rate	up to 15 L/min
Display resolution	0.1 °C	Maximum gas pressure	200 kPa
Heating time	≤ 30 min, 40 °C to 99 °C	Gas connection	for Ø 8 mm hose
Time range	1 min to 99 h 59 min, or continuous	Power • fuse	1000 W • 250 V, 8 A, Ø 5 × 20 mm
Maximum vertical travel	200 mm	Dimensions (W × D × H)	390 × 300 × 850 mm
Positions	12, numbered	Weight	10 kg

RT = room temperature; the control range starts 5 °C above the temperature of the room the instrument stands in. Accuracy, uniformity and heating time are supplier data.

Sample holder and gas

Item	Value	Item	Value
Positions	12, numbered	Needle valves	one per position
Tube diameter	Ø 10 mm to Ø 29 mm	Needle height	set per position
Liquid volume	1 mL to 50 mL	Flow meter	on the controller

No blocks or inserts are needed: the spring-loaded holder grips every tube in the stated range, and the support tray carries it in the water.

Needles and nitrogen

Valves: one on every needle; turn to set the flow for that tube or to close it.

Height: each needle is raised or lowered on its own to suit the tube and the liquid level.

Nitrogen: dry, oil-free gas through a pressure regulator, at most 200 kPa.

Flow: read on the flow meter; set so that the surface dimples without splashing.

Run sequence

1 • Bath: fill with water and set the temperature; the bath heats up.

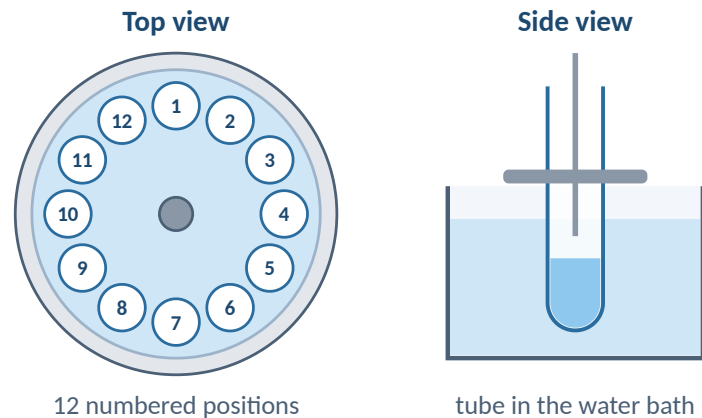
2 • Load: clip the tubes into the holder and lower it into the bath.

3 • Blow: set each needle just above the liquid, open the nitrogen and start the timer.

4 • End: close each valve when its sample is done; then close the gas and raise the ring.

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Twelve positions in a water bath



Schematic. Left: top view of the holder with 12 numbered positions around the stand. Right: a tube in the water bath with its needle above the liquid.

Bath, holder and controller



Stainless steel bath with the tube holder; the controller with LCD and flow meter stands beside it.

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SACO1000 • controller with LCD and flow meter

Ordering information

Item	Value
SACO1000 nitrogen sample concentrator with water bath, 12 positions	PRO4674
Blocks or inserts	not required
Supply	mains voltage is confirmed in the quotation
Delivery	Water bath with holder, stand with needle ring, 12 needles with valves, controller with flow meter, mains cable, manual

Configuration checklist

Tubes: outer diameter Ø 10 mm to Ø 29 mm, 1 mL to 50 mL of liquid.

Temperature: bath temperature within RT+5 °C to 99 °C.

Nitrogen: cylinder or generator with regulator, at most 200 kPa, up to 15 L/min.

Above 99 °C or more tubes? SACO100, SACO200 and SACO400 use a dry block up to 160 °C.

Place of use: fume hood; 390 × 300 mm footprint, 850 mm high.

SUPPLIER AND SUPPORT

COLO Lab Experts

Polje ob Sotli 4, SI-3255, Slovenia

Selection guidance: Send the tube sizes, the volume per sample, the solvent and the temperature. COLO.Science will confirm the configuration and the delivery time.

QUICK CONTACT

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COLO.SCIENCE • SAMPLE CONCENTRATION SUPPORT

Larger volumes or mixed tubes?

Send the tube sizes, the volume per sample, the solvent and the temperature. COLO.Science will confirm the configuration and the delivery time.

Web: colo.si

Ask us:

Price and current discount, delivery time, application support and service — write to sales@colo.si or call us.

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