

How to select Smart Evaporator

Product Number C1- (color)

For gas replacement.
Select a favorite color of the body.

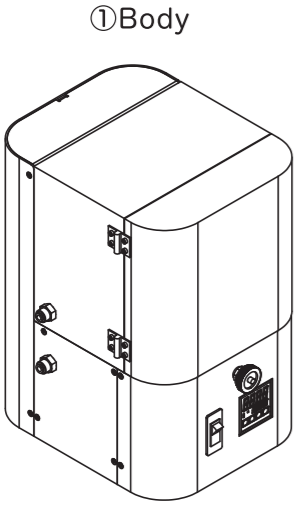
Product Name : Smart Evaporator C1
Product Code : C1- (color)
Size (mm) : Width 220 * Depth 270 * Height 389
Net weight : 5.3kg
Gross weight : 8.5kg

C1- ()

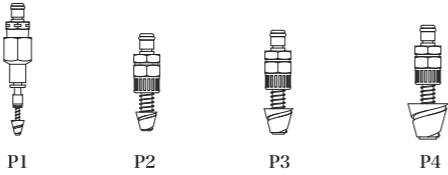
Body color

Body color	Color code
Sun	SU
Squall	SQ
Sky	SK
Grass	GR

The machine is including fourth Conc-plugs from #1 to #4.



② Concplug (Concentration-plug)



Conc plug number	Inner diameter of containers(mm)
1	4~7
2	7~11
3	11~17
4	15~24

• For inquiries about the Concplug P5 (inner diameter:24mm~32mm) please contact the agencies.

Accessories

● Power plug
Power plug is not attached.
Please contact and ask local distributors for details.

● Vacuum pump
Recommendation type of pump : Diaphragm vacuum pump
We have a recommending vacuum pump.
Please contact and ask local distributors for details.

● Product Specifications
Heating control temperature : Room temperature ~ 100°C
Operating humidity limits : From 20 % to 80 % (No condensation)
*Please note that the product specification is subjected to the alternation without any notice
Caution!
Don't use cold trap with "liquid nitrogen" because it could cause an explosion due to the liquefaction of oxygen in air.

Need the flow rate of the vacuum pump.

Plug size	Flow rate (L/min)
1	13
2	15
3	33
4	50
5	58

No.25

■Distributor

■Manufacturer

BC BioChromato

BioChromato, Inc.

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TEL:0081-466-23-8382 Fax:0081-466-23-8279
http://www.bicr.biz/ E-mail:info@bicr.co.jp

Introducing!



More than 200 institutions in Japan have been using the Smart Evaporator in their labs since its launch. Now it has been updated with multiple functions requested by our customers.

Easy concentration of small volume samples
Convenient concentrator with simple operation

Smart Evaporator

MADE IN JAPAN



Visit our Website for details and secrets of this new concentrator.

BC BioChromato

Easy concentration of small volume samples

Smart Evaporator MADE IN JAPAN



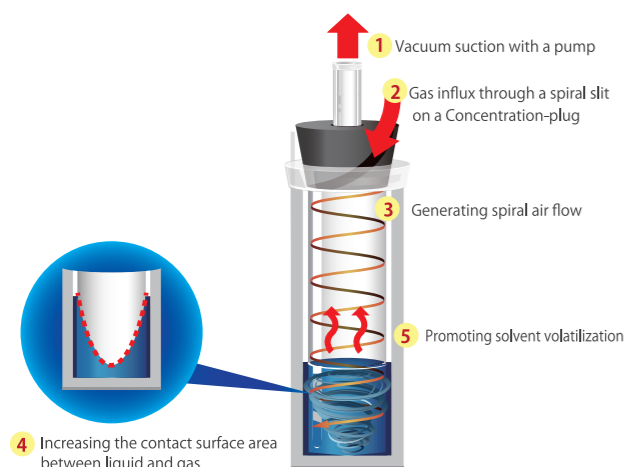
Short cut for tedious concentration procedures



<Spiral Plug mark>

This is the technical mark indicating that the vacuum-style vortex concentration technique of our development is applied.

Vacuum-assisted Vortex Concentration



Vortex-assisted Vortex Concentration increases the contact surface area between liquid and gas, which promotes the speed of concentration. In addition, this enables to concentrate samples without heating at high temperature. (※Liquid temperature should be higher than room temperature to prevent condensation within a container.)

High-boiling-point solvent

Reference (Concentration speed)

Solvent / Capacity	Flow rate	26℃	40℃	70℃
Hexane / 5 ml (20 ml vial)	15L/min	5 min	3 min	3 min
Acetone / 5 ml (20 ml vial)	15L/min	7 min	4 min	3 min
Ethyl acetate / 5 ml (20 ml vial)	15L/min	9min	6 min	5 min
Acetonitrile/ 5 ml (20 ml vial)	15L/min	18 min	9 min	8 min
Methanol / 5 ml (20 ml vial)	15L/min	31 min	10 min	6 min
Ethanol / 5 ml (20 ml vial)	15L/min	31 min	10 min	6 min
*Deionized Water / 5 ml (20 ml vial)	29~30L/min	95 min	49 min	28 min
*DMF / 5 ml (20 ml vial)	20~30L/min	68 min	43 min	24 min
*DMSO / 5 ml (20 ml vial)	23~30L/min	241 min	195 min	69 min
*NMP / 5 ml (20 ml vial)	25~30L/min	N/A	N/A	71 min

* Gas purge data

Useful in many different research fields

- Organic Chemistry
- Environmental Analysis
- Materials Science
- Bio Chemistry
- Polymer Chemistry
- etc

Used For

- ☐ Compounds after organic synthesis
- ☐ Solvent removal after NMR
- ☐ Samples after fractionation and purification
- ☐ Samples after solid extraction

Reasons to be used

1 Bumping-free

Plugs with a spiral slit can prevent bumping by eliminating high vacuum state and generating spiral air flow to stir whole samples.

2 DMSO & DMF concentration

The unique concentration principle, spiral air flow, enables us to efficiently concentrate high-boiling temperature solvents, such as DMSO, DMF and water, without heating.(Keep the temperature of samples higher than that of room temperature to avoid condensation.)

Reference (Concentration speed)

Solvent / Capacity	40℃	70℃
*DMSO / 1 ml (20 ml vial)	94min	38min

* Gas purge data

3 Efficient sample recovery

No requirement of sample transfers eliminates the risk of sample loss and saves time.

4 Compatible with various containers

Tapered concentration plugs are compatible with more than 500 different containers such as vials and micro tubes etc.



5ml vial, micrtube, micro test tube , 1.5ml /2ml vial Sample vial for HPLC falcon tube / conical tube etc...

5 Easy handling

It only takes a few minutes to start concentration by turning a control valve after setting up samples.