

# Smart Evaporator

A simpler way to concentrate samples



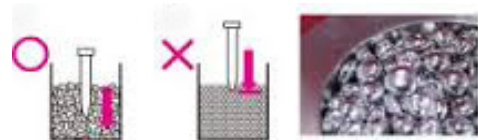


New "Open Type"

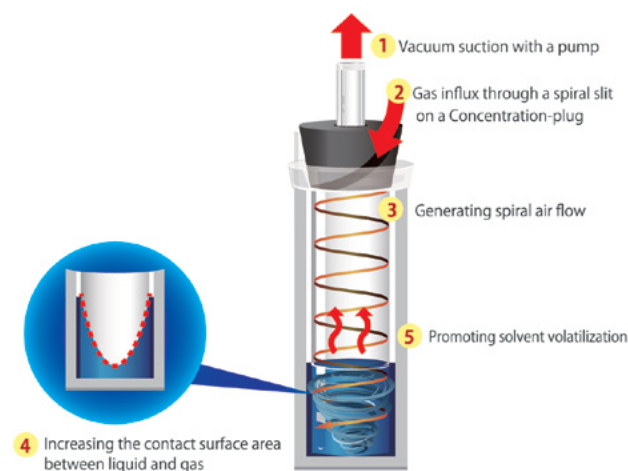
Note: Vacuum pump separately needed for both types.

**Features**

- Perfect for small volume samples
- Compact size fits easily in a glovebox
- Consistent concentration times
- Avoid sample loss due to switching containers
- Faster setup than rotary evaporators
- Works with a large variety of containers



**Vacuum-Assisted Vortex Concentration**



Vortex-assisted Vortex Concentration increases the contact surface area between liquid and gas, which promotes the speed of concentration.

**Concentration Times**

Solvent / Capacity	Flow rate	26°C	40°C	70°C
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)	15L/min	95 min	49 min	28 min
*DMF / 5 ml (20 ml vial)	15L/min	68 min	43 min	24 min
*DMSO / 5 ml (20 ml vial)	15L/min	241 min	195 min	69 min
*NMP / 5 ml (20 ml vial)	15L/min	N/A	N/A	71 min

\* Gas purge data

**Life without Smart Evaporator**

1



**Bump-free**

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

**Life with Smart Evaporator**



**Life without Smart Evaporator**

3



**Efficient sample recovery**

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

**Life with Smart Evaporator**



2



**DMSO & DMF Concentrator**

The unique concentration principle of spiral air flow enables you 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).



4



**Compatible with various containers**

Tapered concentration plugs are compatible with many different types of containers such as vials and micro-tubes under 12 cm tall.

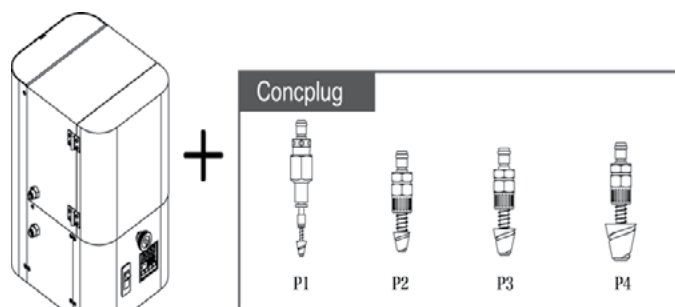


## Applications

- For concentrating samples after organic synthesis
- For solvent removal after NMR
- For concentrating samples after fractionation and purification
- Research fields: organic chemistry, material science, polymer chemistry, environmental analysis, biochemistry etc.

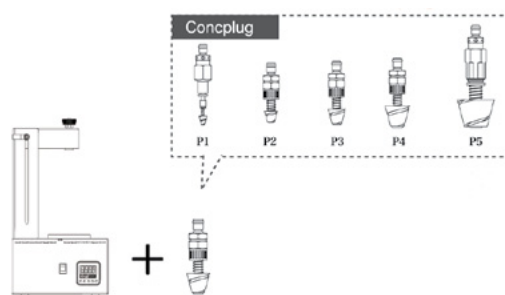
## to select your Smart Evaporator

### 1. With cover for gas replacement-Closed Type



Concplug #1-4 included

### 2. Without cover for open air-Open Type



Select one Concplug

Concplug #	Inner diameter of container mouth (mm)
1	4~7
2	7~11
3	11~17
4	15~24
5	24~32

Product Name	Smart Evaporator
Product Code	R80.900.01 (Sun) R80.900.02 (Sky) R80.900.03 (Grass) R80.900.04 (Squall) R80.900.05 (Sun, Open Type).
Size (mm)	Closed Type: W220 x D270 x H389 mm, Open Type: W205 x D150 x H361 mm
Weight	Closed Type: 8.5 kg, Open Type: 2.7 kg
Functional Temperature	Room temperature~100 °C

Caution! Do not use cold trap with liquid nitrogen because it could cause an explosion due to the liquefaction of oxygen in the air.

Please note that the product specification is subject to change without notice.



**Innovations United**  
 300 East 57th Street Suite 11J  
 New York, NY 10022  
 Web: [www.innovationsunited.com](http://www.innovationsunited.com)  
 Email: [info@innovationsunited.com](mailto:info@innovationsunited.com)  
 Tel: 212-204-0075  
 Fax: 484-313-6368

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