For those who wish to collect the solvents

Introduction of the circulation system for Smart Evaporator

If you wish to collect the solvents when operating Smart Evaporator C1, we recommend our customers to install this circulation system. Since the evaporation with Smart Evaporator C1 generates the very fast air flow, Smart Evaporator C1 would require the different types of trap than the ones ordinary used with rotary evaporators. Also the thick hose is recommended in this system in order to minimize the decrease of air flow which also contributes to the reduction of pressure drop.

A Set of C1 Circulation System

- Stand ---------- 1pcs
- Condenser --------- 1pcs
- Clamp holders ------- 1pcs
- Connecting hoses -- 3pcs
- Three prong clamp - 1pcs
- Erlenmeyer flask ---- 1pcs
- Hose nipples ----- 4pcs
- Y shaped tube ----- 1pcs
- Tube adapter(9mm) 2pcs

■Features

・This closed system would prevent the impurity contamination which also dedicates to the high collecting ratio of solvents.

・In case the Smart Evaporator C1 is filled with gas and this circulation system is installed, the required amount of the gas would be reduced more than the normal setup.

・Since this system uses the cold water, you can also use your own cold water circulator.

■Notes

・Do not use the liquid nitrogen for the refrigerant. The oxygen is liquefied and it may cause the explosion.

・The system disposition is recommended as mentioned to achieve the efficient collection of the solvents. Please structure as recommended since the other dispositions of this system may decrease the collecting ratio of solvents.

・You may also need a vacuum pump. (Please use the diaphragm vacuum pump following to our recommendations.)

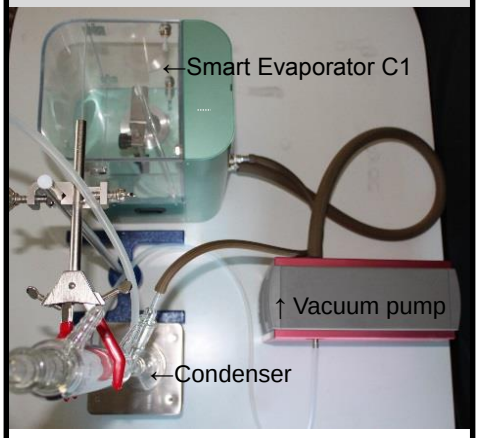
Collecting ratio data

Solvents	**Collecting ratio**
Methanol	98.1%
Acetone	95.8%
Hexane	88.5%
Acetonitrile	99.1%

The temperature of water circulation system was -10℃

C1 Circulation System outline figures　~How to set up the circulation system~

Composition of the circulation system

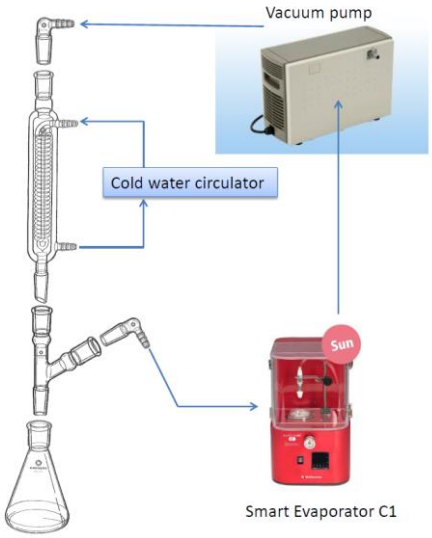


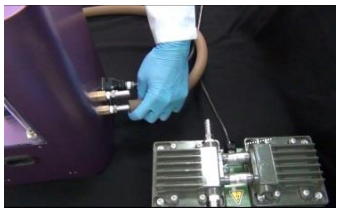
Set the hose nipples on the following parts before you connect the hoses.

*port on C1 for the circulation hose

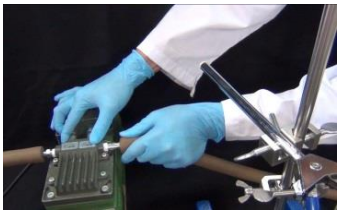
*the port on C1 for the vacuum pump

*the suction ports on the vacuum pump

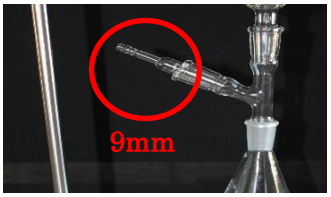




1. Connect the port on C1 for vacuum pump and the suction port on the vacuum pump.



2. Connect the exhaust port on the vacuum pump and the port on the upper part of the condenser.



3. Connect the port on the lower part of the condenser and the port on C1 for the circulation hose.

BioChromato