

# Introduction of capable containers to be used with "Smart Evaporator"










◆ Smart Evaporator is able to achieve concentrations with any types of containers, **so you can use your own ones according to your examination purposes.**

\*Containers should have mouth inner diameter from 4mm to 32mm, and height less than 120mm.

For example, if preferred to use egg-plant shaped flask, 50ml-egg-plant shaped flask is an applicable size to use.

◆ Among all of those capable containers, the following containers would especially result you **the higher concentration speed and the easier usability.**

\*A concentration plug which is necessary for using Smart Evaporator is indicated as "Spiral Plug".

Containers (Spiral Plug: P1~P5)	Advantages of using such containers (user voice)
 <p>1.5ml/2ml vial Sample vials for HPLC (Spiral Plug P1)</p>  <p>Vials with conic bottoms (capable Spiral Plug depends on the size of mouth inner diameter)</p>	<ul style="list-style-type: none"> <li>• It is convenient that I can concentrate solvent with high-boiling point such as DMSO or DMF in LC vial.</li> <li>• This is suitable for evaporations of samples previously measured by NMR.</li> <li>• I prefer to use the vials with conic bottoms for easier collections of valued sample. However with the other evaporation systems, this type of container is not capable so we had to use the other types of containers which eventually make us concerned of sample loss. With Smart Evaporator, it comfortably utilizes existing containers so we can concentrate samples at ease.</li> </ul>
 <p>micro test tube (Spiral Plug P1)</p>	<ul style="list-style-type: none"> <li>• I use the 2ml micro test tubes to be utilized with fraction collector, and it's been always difficult to concentrate very small amount of samples in the micro test tubes. Smart Evaporator is much effective that we can directly concentrate collected samples left in micro test tubes.</li> </ul>
 <p>5ml vial 10ml vial (Spiral Plug P2)</p> <p>20ml vial (Spiral Plug P3)</p> <p>50ml vial (Spiral Plug P4)</p>	<ul style="list-style-type: none"> <li>• Smart Evaporator is useful in case if I want to store samples afterwards. After the synthesis, it was too bulky to store samples in egg-plant shaped flasks and also the number of flasks was limited so I needed to transfer samples into sample tubes then concentrate those. Smart Evaporator is capable to evaporate samples in sample tubes and I don't need to expressly move samples from egg-plant shaped flasks. I'm appreciated to have less burden.</li> <li>• The vials are available relatively at a lower price, so with Smart Evaporator I can willingly exchange containers when concerning of contaminations.</li> </ul> <p>※Vial: also referred to as "sample tube" or "screw tube"</p>
 <p>microtube (Spiral Plug P2,P3)</p>	<ul style="list-style-type: none"> <li>• Usually I use the centrifugal concentrator, and Smart Evaporator is very convenient when I need to concentrate the sample of only one micro tube. I can directly apply the existing micro tubes for concentrations, so don't need to prepare additional egg-plant shaped flasks and there's is no necessity of setting up the rotary evaporator which is a time-consuming work.</li> </ul>
 <p>conical tube/15ml tube (Spiral Plug P3)</p>  <p>conical tube/50ml tube (Spiral Plug P5)</p>	<ul style="list-style-type: none"> <li>• I'm appreciated that I can concentrate samples in tubes while there are not many concentrating systems which can deal with centrifuge tubes.</li> <li>• Conventionally I use the rotary evaporator, and it is burdensome to handle relatively big egg-plant shaped flasks. The amount of solvent is only 35ml, but I still have to use the 200~300ml egg-plant shaped flask. With Smart Evaporator, I can use 50ml conical tube when concentrating the same amount of solvent (35ml). By directly using the container brought from the previous process, I feel the merit to have less sample loss.</li> <li>• In case of handling the small containers decompressed like the rotary evaporator, it easily causes bumping since the tube is narrow and also deforms the shape of containers especially resin-made ones. Smart Evaporator has a great usability that there is no bumping and it does not require us to be particular about the pressure resistance of containers.</li> </ul>