

## DrySyn Spiral Evaporator

*Parallel evaporation of high boiling solvents in one compact unit*

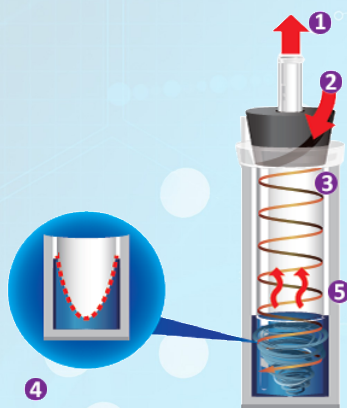
The DrySyn Spiral Evaporator offers fast and effective parallel evaporation for up to four vials without solvent bumping. The system is used to rapidly concentrate high boiling solvents like DMSO, DMF, NMP and water in small reaction vials, without the need for high temperatures.

- Nitrogen purging possible for inert conditions
- Anti-bumping to alleviate cross-contamination
- Ergonomic design to accommodate varying vial sizes
- Interchangeable spiral plugs enabling compatibility with all vial sizes up to a 24mm neck diameter
- Rapid evaporation of high boiling solvents, including DMSO, NMP, DMF & water
- Efficient sample recovery
- Vacuum pump requires 4-8m<sup>3</sup>/hr flow rate
- Compatible with DrySyn MULTI reaction vial inserts (see overleaf)



### Vacuum-Assisted Vortex Concentration

*Rapid Evaporation*



1. Pull a vacuum
2. This promotes gas influx through a groove on the spiral plug
3. Which generates a spiral air flow
4. Increasing the contact surface area between liquid and gas
5. Promotes solvent evaporation

**To discuss vacuum requirements & suitability please contact us.**

*"The Spiral Evaporator allows us to vac down up to four different samples at a time, streamlining work-up procedures for multiple reactions.*

*It saves so much time, and there is no fear of bumping.*

*It removes all of the hassle associated with attaching vials to rotary evaporators and allows the concentration of samples directly into vials.*

*Evaporating high-boiling solvents like DMF and DMSO is another big plus."*

**Dr Alex Cresswell,  
University of Bath, UK**

## DrySyn Spiral Evaporator Solvent Data

*Concentration speed (minutes to dryness)*

Solvent/Capacity (5 ml in 20 ml vial)	Flow rate per tube / m <sup>3</sup> per hour (so x 4)	Temperature of bath / °C		
		26	40	70
Hexane	1	5	3	3
Acetone	1	7	4	3
Ethyl acetate	1	9	6	5
Acetonitrile	1	18	9	8
Methanol	1	31	10	6
Ethanol	1	31	10	6
*Deionized water	2	95	49	28
*DMF	2	68	43	24
*DMSO	2	241	195	69
*NMP	2	N/A	N/A	71

\*Gas purge data



- **Spiral Plug size 1** for 4-7mm neck diameter tubes
- **Spiral Plug size 2** for 7-11mm neck diameter tubes
- **Spiral Plug size 3** for 11-17mm neck diameter tubes
- **Spiral Plug size 4** for 15-24mm neck diameter tubes



### Popular purchase options

**ADS14-4: DrySyn Spiral Evaporator (DSE)** comes with height adjustable manifold, glass shield, 3 x blanking plugs, hose barbs, and 4 x spiral plugs of one size.

**ADS16-SP-4-size Additional set of 4 spiral plugs** state size required when ordering

**ADS3-R-size DrySyn reaction vial inserts** in any one standard size (pack of 3).

All inserts are typically 4 position unless otherwise stated. Size refers to the diameter of the hole.

11.80 (9 position) / 15.00 / 16.20 / 17.40 / 20.20 / 24.40 / 25.75 / 27.40 mm

**ADS3-RT-17.40 DrySyn TAPERED reaction vial inserts** pack of 3 inserts, 17.40 mm

**ADS16-1-C Clamp** holds one DrySyn Spiral Evaporator unit securely on a hotplate support rod

**ADS19-BASE DrySyn UNO base plate** holds base DSE securely on a hotplate.

**ADS-HP-S-NT Asynt hotplate stirrer kit** including electronic contact thermometer, support rod, boss head

*Contact us for further information.*