

## The CondensSyn® & CondensSyn MINI Waterless Reflux Condensers

*Simple, safe and no risk of flooding*

Registered  
Community  
Design



### Benefits:

- Robust
- Easy to clean
- High performance
- Simple and safe to use
- Environmentally friendly
- Short pay-back time
- No risk of flooding
- Available in the 3 lengths to suit all R&D scales, all with standard socket sizes

## Save money, save water, save the planet!

### *The smart solution for everyone*

The average rate of water used in a condenser is 2 litres per minute. The water costs used below are at £1.22 per cubic metre supply and £1.56 per cubic metre waste which is equivalent to 0.28p per litre.

This commercial rate cost is from a water supplier here in the UK, Anglian Water in March 2020.

See table (below) for savings.

|                                      | 5 hours per day | 24 hours per day |
|--------------------------------------|-----------------|------------------|
| <b>Water used per day</b>            | 600 litres      | 2880 litres      |
| <b>Cost per day</b>                  | £1.68           | £8.06            |
| <b>Cost per month (working days)</b> | £33.60          | £161.20          |
| <b>Cost per year (working days)</b>  | £403.20         | £1,934.40        |

**NEW adapter available  
to allow the CondensSyn  
to be used for distillation**

See details overleaf



**Ask for a demonstration online/in your laboratory today!**

## CondensSyn & CondensSyn MINI

Independent tests were performed by a leading UK University to evaluate the performance for safe use in their research and teaching laboratories. Evaluations were based upon a basic 350 mm effective length CondensSyn and a 250 mL round bottom flask with 150 mL of solvent.



| Solvent         | DCM   | Acetone | THF   | Ethanol | Acetonitrile | Water | Toluene |
|-----------------|-------|---------|-------|---------|--------------|-------|---------|
| bp [°C]         | 40    | 56      | 66    | 78      | 82           | 100   | 110     |
| oil bath [°C]   | 50    | 71      | 78    | 100     | 100          | 120   | 125     |
| difference [°C] | 10    | 15      | 12    | 22      | 18           | 20    | 15      |
| time [min]      | 240   | 360     | 300   | 300     | 300          | 240   | 300     |
| %-loss (total)* | -0.8% | -1.3%   | -1.4% | -0.5%   | -0.9%        | -1.6% | -0.9%   |
| %-loss per hour | -0.2% | -0.2%   | -0.3% | -0.1%   | -0.2%        | -0.4% | -0.2%   |

\*It is recommended that to prevent further losses a temperature differential is kept below 10 °C, especially when using solvents below 60 °C boiling point.



*"Since receiving the CondensSyn waterless condenser, we have substituted standard water condensers for the waterless counterpart in a number of reactions, including overnight refluxes and Soxhlet extractions. We have found the transition to CondensSyn seamless! In our tests, CondensSyn has been as efficient as traditional condensers, however, the waterless setup is safer, greener and easier to use without loss of performance. The lack of tubing also allows for a tidier and safer working area and the sleek shape of the condensers would allow for multiple condensers to be setup on the same hot plate, vastly enhancing productivity!"*

Dr Panagiotis Manesiotis Research Team, Queen's University Belfast



## Popular Purchase Options

Key sizes shown below but other sizes are also available

200 mm recommended for use with flasks up to 100 mL in size†  
350 mm recommended for use with flasks up to 500 mL in size†  
450 mm recommended for use with flasks up to 1000 mL in size†

**GB-C-200-B14** 200 mm with B14 socket

**GB-C-200-B19** 200 mm with B19 socket

**GB-C-200-B24** 200 mm with B24 socket

**GB-C-350-B14** 350 mm with B14 socket

**GB-C-350-B19** 350 mm with B19 socket

**GB-C-350-B24** 350 mm with B24 socket

**GB-C-350-B29** 350 mm with B29 socket

**GB-C-450-B14** 450 mm with B14 socket

**GB-C-450-B19** 450 mm with B19 socket

**GB-C-450-B24** 450 mm with B24 socket

**GB-C-450-B29** 450 mm with B29 socket

**GB-C-DIST-B24** Distillation adapter for use with B24 socket CondensSyn

**GB-C-DIST-THERM** Thermometer and adapter set with B24 socket

† Not more than half full.

