



PRESS RELEASE

Baffled Reactor System Enhances Exothermic & Large Scale Reactions

Asynt Ltd., in conjunction with *Innovative Physical Organic Solutions** (IPOS), has created a **Baffled Controlled Lab Reactor system** that offers the ultimate in fast mixing / dispersion.

By using specially designed PTFE baffle blades together with a PTFE turbine stirrer, Asynt is now able to offer scientists a new version of their 5000ml ReactoMate Controlled Lab Reactor system which is built to mix reactions more quickly and effectively.

Most reaction vessels used by research chemists employ simple anchor or turbine stirring devices, both of which move liquid very well but usually this is in a circular direction with a vortex created in the centre. Despite this mixing looking dramatic the time for reactants to mix / disperse homogeneously with anchor or turbine stirrers is relatively slow.

This may not be an issue when the reaction under study is slow and non-exothermic however exothermic reactions such as hydrogenation, nitration, polymerisation, acid / base neutralisation and catalysis, especially those that require efficient cooling, can be seriously affected by slow dispersion during reagent addition. Similarly many reactions that work well in a lab flask often, when scaled up above 1000ml, can also suffer seriously from this dispersion issue.

Asynt Ltd

Unit 29 Hall Barn Road Industrial Estate Isleham Cambridgeshire United Kingdom CB7 5RJ
T: +44 (0)1638 781709 F: +44(0)1638 781706 sales@asynt.com www.asynt.com

Registered office: Eldo House, Kempson Way, Bury St Edmunds, Suffolk, IP32 7AR Registration No: 5160407
VAT No: GB 838 5592 82



For a wide range of exothermic and large scale reactions - Asynt's ReactoMate Baffled Controlled Lab Reactor system has been shown to improve reproducibility of results, increase selectivity and reduce potentially unwanted side reactions as a result of its ability to provide fast mixing and dispersion. The effectiveness of baffled reactors can be seen on a selection of videos at www.asynt.com/product/reactomateractionsystems/ (select downloads).

In addition to the new 5000ml system, Asynt offers a special reactor lid, baffles and stirrer for customers to use on existing suitable reaction vessels. Other size ReactoMate Baffled Controlled Lab Reactor systems are available as custom orders.

For further information please contact Asynt on +44-1638-781709 / sales@asynt.com.

Asynt is a leading supplier of affordable products, consumables and services for chemists in industry and academia. With staff of trained chemists - Asynt is able to draw upon this in-depth applications knowledge to provide a high level of customer support for its DrySyn Heating Blocks, Controlled Lab Reactors, Synthesis Tools, Evaporators, Circulators, Temperature Control Systems, Vacuum Pumps and Laboratory Safety Equipment.

* IPOS is a research group contained with the University of Huddersfield, UK - see www.ipos.org.uk

APRIL 2015

asyntpr43.doc

Asynt Ltd

Unit 29 Hall Barn Road Industrial Estate Isleham Cambridgeshire United Kingdom CB7 5RJ
T: +44 (0)1638 781709 F: +44(0)1638 781706 sales@asynt.com www.asynt.com

Registered office: Eldo House, Kempson Way, Bury St Edmunds, Suffolk, IP32 7AR Registration No: 5160407
VAT No: GB 838 5592 82

Illustrative image: (image available on request)



For more information please contact:

Media: Dr Bill Bradbury

+44-208-546-0869 / info@primetek-solutions.com

Asynt Ltd

Unit 29 Hall Barn Road Industrial Estate Isleham Cambridgeshire United Kingdom CB7 5RJ
T: +44 (0)1638 781709 F: +44(0)1638 781706 sales@asynt.com www.asynt.com

Registered office: Eldo House, Kempson Way, Bury St Edmunds, Suffolk, IP32 7AR Registration No: 5160407
VAT No: GB 838 5592 82