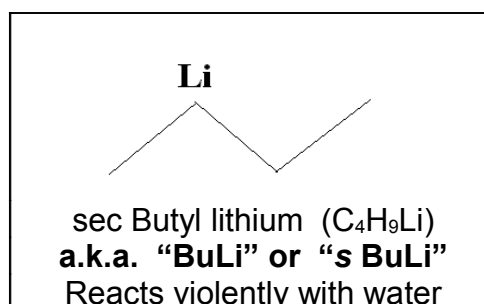


Pumping of Highly Reactive Organometallic Reagents now possible with Vapourtec R Series

There are some reagents which are very useful but extremely challenging to work with (especially in flow). One example is "BuLi".

Up until now, use of BuLi in a benchtop flow chemistry system was almost impossible due to the problems encountered when pumping it. Inevitable unwanted exposure to moisture would result in the formation of precipitates that would rapidly clog and even damage the pump.

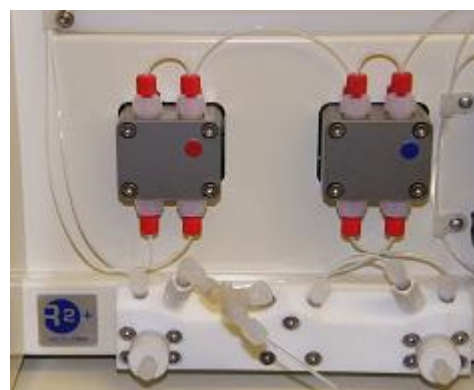


Reactions using BuLi often also require sub-ambient temperatures for safety, stability and thermal control.

Finally, a solution

Vapourtec have developed a system for pumping this sort of reagent which consists of

- The Vapourtec R series Acid Resistant pumping module
- A specially developed add on unit
- A series of protocols for startup, reaction execution and post reaction cleanup that ensures reliable and stable operation of the system.



The Vapourtec Acid Resistant Pumping Module

This system is already being utilised by one global pharmaceutical company who has acted as development partner.

(The Vapourtec acid resistant pumping module is able to pump strong acids including fuming nitric acid, concentrated sulphuric acid. There is no metal or PEEK components at any point in the flow path).

Subambient conditions also catered for

Also recently launched is the Vapourtec Cooled Reactor module, which allows flow reactions to be precisely controlled at temperatures down to -70°C .

The cooled reactor is also strong acid compatible, so can be used in conjunction with the acid resistant pumping module described above.



What about other similar reagents ?

Work has also been carried out with diisobutylaluminium hydride (DIBAL-H). Though a lesser volume of testing has been completed to date, indications so far are that the same approach is applicable, and hence that DIBAL-H can be successfully pumped too.

Please contact Vapourtec if you have other reagents in mind.

Find out more

For more information on the Acid Resistant pump module, go to

<http://www.vapourtec.co.uk/products/rseriesystem/acidresistant>

For more information on the Cooled Reactor, go to

<http://www.vapourtec.co.uk/products/rseriesystem/cooledreactor>

To discuss a specific requirement involving the use of BuLi (or DIBAL-H or any other reagent of this sort), please contact

info@vapourtec.com

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<http://www.vapourtec.co.uk/newsletter/signup>