

ACETONITRILE SHORTAGE INFORMATION

You may be aware there is currently a worldwide shortage in the supply of acetonitrile that is affecting laboratories across all industries. Chemical suppliers are still able to supply acetonitrile but supplies are restricted, costs increasing and lead times uncertain.

Why is there a shortage of acetonitrile?

Acetonitrile is mainly manufactured as a by-product in acrylonitrile production. In 2008 there was a dramatic downturn in global demand for this product - acrylonitrile is used to make plastic products including parts used in the automotive industry. Latest forecasts suggest that the global recession will continue to affect acetonitrile availability in the future.

Why is this a problem for analytical laboratories and how does this affect me?

Many analytical methods for drug analysis by HPLC use acetonitrile for sample preparation and in mobile phases. An increase in acetonitrile costs will therefore have a direct increase in the running costs of your laboratory. More importantly, the availability of acetonitrile could delay the analysis of test results needed for finished product batch release and therefore cause serious problems to your supply chain.

What's the solution?

Broughton Laboratories have a wealth of experience in dealing with these sorts of business challenges. We can help you reduce your acetonitrile usage by optimising or re-developing your current analytical methods.

Will I have to validate the re-developed methods?

Yes, the changes to your analytical methods would normally require re-validation. However, the necessity to do so and the level of validation required will depend upon your regulatory requirements. Again, Broughton Laboratories have significant experience in test method validation and can give you full support to ensure regulatory compliance.

Does the cost of re-development and validation not outweigh the cost associated with the acetonitrile shortage?

That depends on your acetonitrile usage and the cost associated with the risk of delays to your supply chain. This case study example may help; *recently we were asked to re-develop an analytical test method for the determination of the active compound in a finished product. Through the modification of the column, stationary phase and sample diluent, the HPLC run time was reduced by over 50% and the acetonitrile consumption reduced by over 75%. A typical run size of 20 samples per run (with one run per day) equated to a reduction from 4.25 litres of acetonitrile to less than 1.5 litres per week. Not only does this reduce the solvent purchase and disposal costs but also increases sample throughput.*

So what next?

Whether you are looking to reduce your acetonitrile usage, reduce your solvent costs in general or simply improve the effectiveness and efficiency of old analytical methods, please call us for a free, no-obligation method review. Our friendly team of dedicated people ensure our clients always receive continuous high levels of service and professionalism.

For further information please call Zara Watson on 01756 700255 or email zwatson@broughtonlaboratories.co.uk