

10 THINGS TO CONSIDER WHEN USING SORBENT TUBES AND CAPS FOR THERMAL DESORPTION

1 Sorbent choice



Check compatibility between sorbent and compounds of interest

Take into account humidity of the sample environment

Consider using multi-bed sorbent tubes to extend analyte range

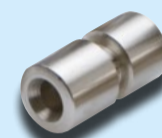


2 Compatibility



Consider the best cap for each stage of your workflow e.g. sampling, analysis, storage

Select dimensions of your tubes for instrument compatibility



3 Material



Stainless steel tubes are suitable for most compounds

Choose inert-coated or glass tubes for analysing reactive compounds

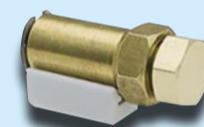
4 Quality



Check manufacturer is ISO9001 accredited to ensure consistent quality of supply

Confirm the manufacturer has stringent quality control of manufacturing procedures, including strict tolerance on mass and flow testing

Look for evidence of background checks on conditioned tubes

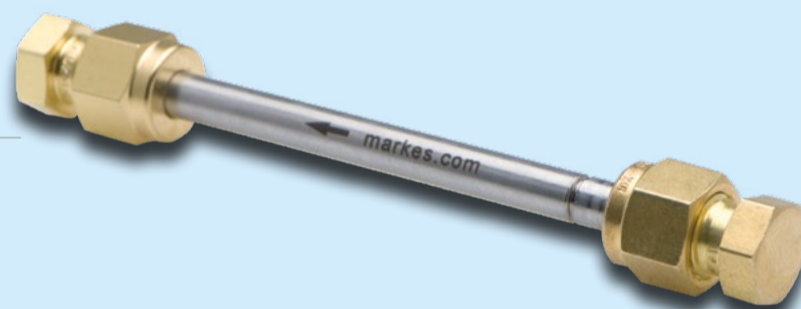


5 Conditioning



Consider using pre-conditioned tubes ready for use on arrival

Always use an offline tube conditioner, such as the Markes TC-20, to improve productivity



6 Calibration



Regularly check your system is calibrated efficiently using tubes loaded with either check standards or certified reference standards

Method calibration: Use a Calibration Solution Loading Rig to load liquid and gas standard onto tubes and generate relevant calibration curves

7 Lifespan



Sorbent type, temperature of desorption and number of thermal cycles impacts tube lifespan

Extend the lifespan of sorbents by using lower temperatures where possible and handling tubes with care

Extend the lifespan of caps by cleaning and regularly replacing ferrules and O-rings

Standard Methods such as EPA325 require tubes to be replaced after a set number of thermal cycles

8 Accessories



Get it right first time with supplies and instruments designed to work together

Use supplies optimised for a specific application or method e.g. US EPA 325



9 Labelling



Advanced labelling such as RFID tagging or unique barcodes and serial numbers help you keep track of samples

Sampling arrows etched into the tubes indicate sampling flow direction and minimise errors in the field

Consider custom etching or banding of tubes for rapid identification



10 Expertise



Buy from experts who help you choose the right products for your application

Factor in post-sales support – including product and application-specific advice

To talk to one of our experts about tube and cap selection, visit www.markes.com or email enquiries@markes.com

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