Technical Quality TQ

Number of samples performed in automatic sequence

The number of samples performed in an automatic sequence is determined by the mode of operation. The capacity for each mode is:

GPC Only Mode – 72 Samples

GPC with Evaporation – 72 Samples

GPC with SPE Mode - 27 Samples

SPE 2 Column Mode – 18 Samples

SPE 3 Column Mode – 9 Samples

SPE w/ Evap. Single Column Mode–27 Samples

SPE Single Column Mode – 27 Samples

SPE w/ Evaporation 2 Column Mode - 18 Samples

SPE w/ Evaporation 3 Column Mode – 9 Samples

Evaporation Only Mode – 72 Samples

User Friendliness

-Easy maintenance by the user:

Maintenance Required by User

GPC Cleanup Module: Once yearly or every 2000 hours whichever is greater – replace solvent pump seals and sonicate check valves on pump head.

GPC Cleanup Column: The column should be re-packed or replaced when calibration chromatograms or column blanks do not meet criteria. Column life will vary depending on number of samples and matrix type. If re-packable column is chosen – customer can replace packing according to instructions or the column can be returned to the dealer or manufacturer for repacking.

AccuVap Module: No user scheduled maintenance for this system. The Evaporation Chamber can be cleaned manually by the user for special circumstances but is unnecessary for normal operation.

Inline SPE Module: No user scheduled maintenance for this system.

Overall System: Software and firmware updates may be chosen by the user. They are sent via email or with direct connection to the internet.

-flexibility in the application of different chromatographic methods

Chemical Research 2000 S.r.l.

Via Vico Viganò, 55 - 00133 ROMA - Tel. +39 06 20630997 - Fax +39 06 20685490



This system is controlled by a Microsoft PC based application. Several methods are possible with this system across several modes including: *GPC Only Mode ,GPC with Evaporation , GPC with SPE Mode , SPE 2 Column Mode SPE 3 Column Mode , SPE w/ Evap. Single Column Mode, SPE single Column Mode, SPE w/ Evaporation 2 Column Mode , and SPE w/ Evaporation 3 Column Mode , and Evaporation only mode.* Note: Each SPE mode allows for the use of different types of SPE cartridges and columns for a wide variety of applications including the cleanup of POPs.

Generally, the only user change required is at the sequence level in the PC software. The software has a *Queue or Sequence* section for the user to set up the sample information, method, and the application they wish to perform. This only takes a few clicks in the PC software so the time is very short. The PC *Sequence* additionally allows different methods to be combined sequentially to make a MACRO method for increased flexibility and decreased user intervention.

In some special cases, the user may be required to place a different tray on the autosampler mat or change the GPC Column and mobile phase which takes only a few minutes.

-Specific application software easy adapted to be adapted to different applications

The PC User interface software includes default method templates for: GPC Cleanup, GPC Cleanup with Evaporation, GPC Column Calibration, and Fractionation to name a few. It is also easy for the user to create method templates for new applications. An existing method template can be opened and the desired variables changed and saved as a new method for use in sample processing. Some examples are: Multi-column cleanup for POPs (macro method), GPC Cleanup for EPA3640, GPC Cleanup for pesticides, and Carbon Cleanup for Planar and Co-Planar compounds.

The PC User interface software also includes a chromatography data package to store data from the process. It includes application specific software for GPC Cleanup Column calibration. It is able to perform the column resolution test, display a chromatogram with attributes and generate a report.

Please refer to the included PowerPoint and brochures for more specific information.