Preparative Fraction Collector

Specifications

Uses
The GERSTEL Preparative Fraction Collector (PFC) collects and concentrates fractions or pure compounds following capillary GC separation. The PFC performs automated collection of up to six user-defined fractions of a sample in addition to the residue. Precise microprocessor control enables unattended operation over days to collect ultra-trace components from dozens or even hundreds of GC runs for further analysis, for example by NMR or FTIR. The PFC includes a flow-splitter to allow simultaneous monitoring of GC peaks by a detector. A unique flow-design eliminates the use of valves in the analyte flow path for best possible compound recovery.

System Configuration
- Compatible with most standard GCs
- Designed for parallel operation with most standard detectors including MS
- Designed for parallel operation with the GERSTEL Cryo Trap System CTS 1 or the GERSTEL Olfactory Detector Port ODP

Traps
- 6 preparative traps with heating and cooling option
- 1 zero trap with heating and cooling option
- Trap volume 1 µL or 100 µL
- Special adapter for direct collection of fractions on adsorbent tubes available.

Trap Cooling Option
- LN₂ cooling* or closed circuit cooling
- Minimum temperature -150 °C (LN₂ cooling)
- Temperatures for the zero trap, traps 1-3 and traps 4-6 can be specified separately (LN₂ cooling)
- Temperature range for closed circuit cooling depends on the model used

Trap Heating Option
- Maximum temperature 250 °C
- Temperatures for zero trap, traps 1-3 and traps 4-6 can be specified separately

Trap Switching
- Sample path without valves
- Heated switching device
- PFC oven temperature max. 400 °C
- Resolution 0.01 min
- Purity 95 % (depends on application)

Transfer Line
- Can be configured on the left or right hand side
- Rigid or flexible transfer line can be selected
- Transfer temperature max. 400 °C
- Max. distance to outer oven insulation with rigid transfer line 14 cm
- Max. distance to outer oven insulation with rigid transfer line 35 cm

Operating Voltage
- 100/115 VAC, 50/60 Hz
- 230 VAC, 50/60 Hz

*) Dewar vessel with 1.0-2.0 bar bar operating pressure mandatory.

Custom solutions for special performance requirements available upon request.
Preparative Fraction Collector PFC

Control
• Based on Controller C506
• In combination with the GERSTEL MAESTRO software, either in stand-alone mode or integrated in selected Agilent® Technologies chromatography data systems (CDS), or coupled to selected CDS from Thermo Scientific®
• Only one method and one sequence table required for the complete system when integrated in a CDS

Operating Conditions
• 15 … 35 °C
• Relative humidity max. 50-60%, non-condensing
• Max. 4615 m above sea level

Storage Conditions
• -20 … 50 °C
• Relative humidity max. 50-60%, non-condensing
• Max. 4615 m above sea level

Dimensions (W × H × D)
• 32 cm × 47 cm × 38 cm

Weight
• 12 kg