PFC Air

PTV Fast Cooling for PTV inlets

Electrically generated Peltier cooling supports rapid cooling of compressed-air-cooled inlets in GC and GC/MS systems.



PFC Air on Agilent GC

CONCEPT

For short GC methods, inlet cooling time can delay the next run. PFC Air stores electrically generated cooling capacity for the cooling process.

Cooled compressed air is directed to the inlet. Additional liquid nitrogen or liquid carbon dioxide is not required.

WORKFLOW

Pre-cool

PFC pre-cooled to at least 35 K below laboratory temperature

Cool

Direct cooled compressed air to the PTV inlet

Continue

Reach a low initial temperature for the next run

YOUR BENEFITS

Faster readiness

Less waiting time before the next analytical run.

Electrical cooling

No additional cryogenic cooling media required.

Retrofit option

For conventional compressed-air-cooled PTV inlets; integration subject to technical assessment.

PERFORMANCE AND INTEGRATION

At least 35 K below laboratory temperature

PFC pre-cooling before the cooling process

Cooling example: depending on inlet type, below 5 °C in about three minutes at an oven temperature of 50 °C. This describes the inlet, not PFC pre-cooling.

Suitable for systems from Agilent, Gerstel, JAS, ATAS and Bruker, among others. Configuration and integration depend on the instrument setup.

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