

GAS CHROMATOGRAPHY- THERMAL CONDUCTIVITY DETECTOR (GC-TCD)



Descriptions

Gas chromatography (GC) is an analytical technique used to separate the chemical components of a sample mixture and then detect them to determine their presence or absence and/or how much is present. These chemical components are usually organic molecules or gases.

The sample solution injected into the instrument enters a gas stream which transports the sample into a separation tube known as the "column." (Helium or nitrogen is used as the so-called carrier gas.) The various components are separated inside the column.

In this instrument, three (3) types of sample can be analyzed, whether in gaseous, liquid, and volatile solid samples directly.

Further Information

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Brand-Model

Agilent 7890N

Basic Specifications

Inlet

Split/Splitless capillary inlet (S/SL).

Column Oven

Dimensions: 28 × 31 × 16 cm. Accommodates up to two 105 m × 0.530 mm id capillary columns or two 10-ft glass packed columns (9 in coil diameter, 1/4 in od), or two 20-ft stainless steel packed columns (1/8 in od).

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Detector

TCD

- Minimum detectable level: 400 pg propane/mL with He carrier. (This value may be affected by laboratory environment.)

Equipment Website (Manufacturer)

Agilent

Types of samples

Gaseous / liquid / volatile solid

Location

Central Analytical Laboratory
(T02, 01-25-01)

Operator

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