



Gas Chromatography- Mass Spectrometry (GC-MS)

Agilent 7890B/5977A inert GC/MSD
with Marke's Unity
Agilent 7890A/5975 inert GC/MSD



GC-MS is ideally suited to the analysis of many small molecular weight organic compounds. These include; amino acids, organic acids, fatty acids, volatile & semi-volatile organics, and petrochemicals/ hydrocarbons. The ALS laboratory in Pathumthani is currently using these instrument for:

- identifying and quantifying volatile organic compounds
- outgassing studies
- testing for residual solvents
- evaluating extracts from plastics
- evaluating contaminants on semiconductor wafers (thermal desorption)
- Able to identify and quantify VOC in environment (cleanroom or semiconductor shop floor) by air sampling tube

We have two dedicated GC-MS instruments with headspace and liquid autosamplers:

Key Features:

- Equipped with Marke's Unity with Ultra MFC (mass flow controller)
- Simultaneous sample tube loading
- Sample preparation in closed system (Teflon chambers in Binder force flow oven), minimizing leak and cross contamination
- Enables reliable, leak-free in-oven connections
- Equipped with Autosampler offers the faster injection time
- Capable of analysing minute amounts of organic contaminants
- Precise and reproducible

Services:

To analyze trace amounts of volatile and semi volatile organic compounds

- Semi volatile organic compounds: Organic residues have the potential to cause various problems including bad contacts and corrosion. This analysis detects and identifies organic contaminants such as hydrocarbon or oil residue on casting and stamping alloy parts, flux residues, and adhesives.
- Volatile organic compounds: When coupled with a Static or Dynamic Headspace setup, it is an excellent tool for analyzing potentially detrimental organic substances that outgas from polymers or adhesives at higher operating temperature.

About ALS

With more than a decade of sophisticated testing experience, ALS Thailand (Pathumthani) has a diverse range of sampling, testing, and consulting services for the Electronics industry. We have dedicated technical staff to deliver reliable and timely analytical solutions for customer testing needs. We specialize in micro-contaminant and RoHS analysis, offering tailored analytical packages that are specific to client requirements and needs. We are ready to deploy our world-class services to additional industries to support Thailand's industry growth. ALS provides the wide range of professional services for Electronics, Semi-Conductor, Auto motive, Telecommunication, and Wear-Check analysis (Tribology).

