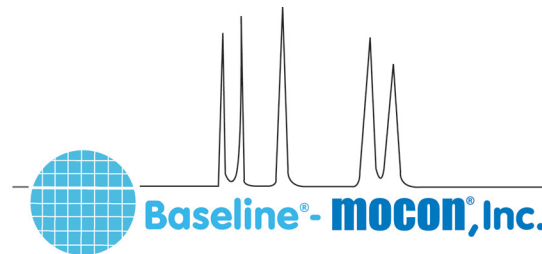


# Series 8900GC Application Note

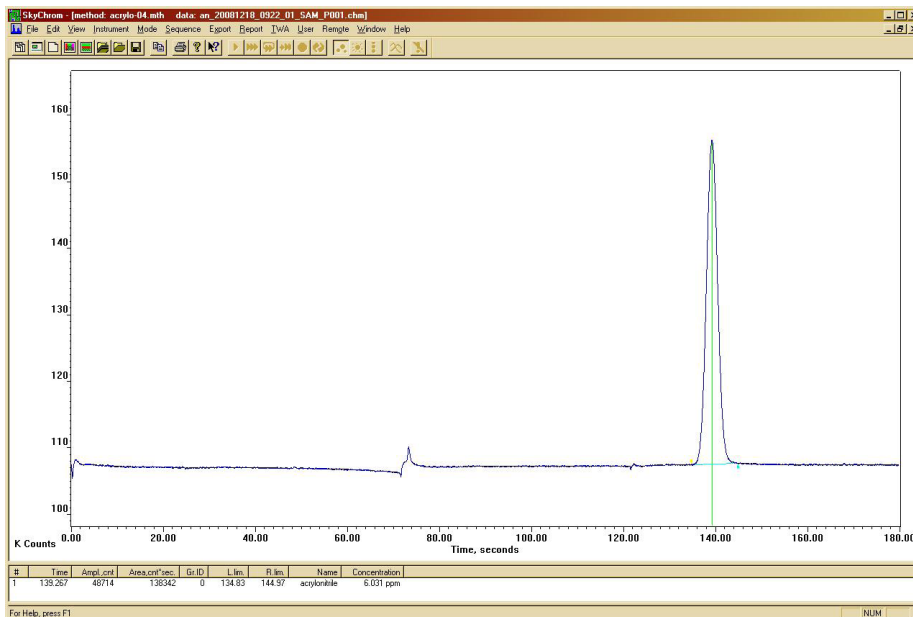
## Acrylonitrile in Air



### Analyzer

The Series 8900 Acrylonitrile Analyzer provides direct measurement of Acrylonitrile in ambient air. This instrument is utilized in industrial plants to monitor workplace exposure limits.

The Series 8900 Acrylonitrile Analyzer employs a flame ionization detector (FID) as the sensing element. A dual column configuration with timed backflush to vent is used to strip off moisture and heavier hydrocarbons. A pre-cut column is used in series with the analytical column. At sample injection a fixed volume of sample is carried to the pre-cut column. Backflush is timed so that only the Acrylonitrile and other similar components are eluted to the analytical column. Contaminants on the pre-cut column are backflushed to vent. Acrylonitrile is separated from potentially interfering components on the analytical column and elute to the detector for analysis.



### Application

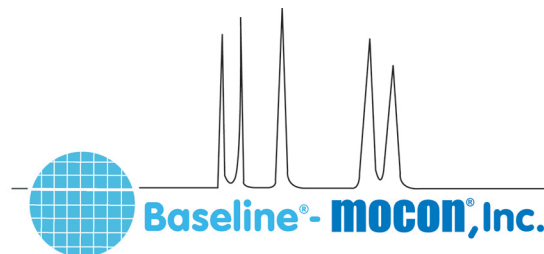
- Monitoring workplace exposure limits during plastics production

### Features

- Direct measurement of Acrylonitrile
- Interference free response
- Automatic calibration for unattended operation
- Automatic baseline adjustment for long-term stability
- Analog output ranges are user selectable
- Summary or TWA report generation
- Graphic display of current or historical concentrations
- Multipoint sampling options
- RS-232 and optional LAN

# Series 8900GC Application Note

## Acrylonitrile in Air



### Specifications

**Analysis Time:** <180 seconds

**Detector:** FID

**Column:** Capillary

**Oven Temperature:** 65°C, Nominal

**Carrier Gas:** Hydrogen, 18cc/min, Nominal

**Lower Detection Limit:** 0.1 ppm Acrylonitrile

**Accuracy:** 1% of Full-scale

**Precision:** 2% of Measured Value

**Span Drift (24HR):** <2% of Full-scale

**Sample Flow Rate:** 250-500cc/min, typical

#### Output:

**Analog:** (1) 0-20ma or 4-20ma loop power supplied, isolated. Selectable for: gas concentration, unintegrated detector signal. Options for up to 20 additional programmable 0-20ma, 4-20ma or voltage outputs: 0-1V, 0-5V, or 0-10V.

**Digital:** RS-232, optional Local Area Network

**Relays:** (5) User programmable relays for concentration and diagnostic alarms (1A @ 30Vdc). Options for up to 32 additional relays available.

**Inputs:** Optional digital input board for 3 contact closure inputs. Supports start analysis, start calibration, and analyze calibration gas sample.

This application note is an only an example based on customer or market specifications. These parameters are variable and therefore do not reflect all of the versatility and options of Series 8900 GC. Please contact Baseline regarding your specific application

A016.2

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