



eGC[®] *environmental* Gas Chromatograph Butyl Acrylate in Ambient Air

The eGC measures trace (i.e., sub-ppbv) levels of butyl acrylate in ambient air within process industrial environments. The eGC is ideal for fence-line or remote monitoring applications in complex chemical backgrounds where the specific measurement of butyl acrylate is important.

INTRODUCTION

The eGC automatically samples the air, performs a gas chromatographic analysis and sends a report on a ten-minute cycle. The system generates a continuous record of chloroprene emissions that is logged on the eGC and also uploaded to a user-accessible web server via an on-board cellular modem. The eGC is unique in its ability to operate in uncontrolled hot and cold environments. The weather station accessory for wind speed and direction makes

the eGC a highly effective area monitor, giving a near real-time picture of the site emissions. Using an array of eGC units for vector triangulation of emissions provides a way to quickly locate emission sources. The near real-time reporting of the eGC provides valuable temporal information that is very complementary to sample canister or passive tube collection methods.

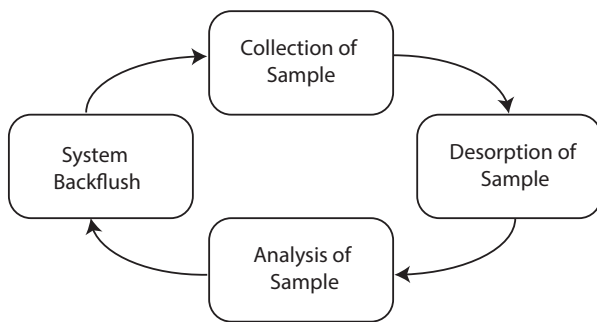
eGC ADVANTAGES

- Fully autonomous operation
- No shelter or wiring construction required
- Automatic calibration
- Laboratory level data quality assurance
- Analysis data fused with local weather conditions and GIS position
- Intuitive graphical data website
- E-mail and text alarm alerts
- Limited maintenance

SAMPLE ANALYSIS METHOD

The eGC uses a selective sorbent trap and thermal desorption to inject a sample of ambient air into the gas chromatograph. The GC column separates butyl acrylate from other chemicals in the sample. These chemicals elute sequentially into a solid-state hydrocarbon detector that measures the butyl acrylate and generates the analytical result. Upon completion of the analysis time, the GC system is automatically backflushed and prepared for the next analysis.

eGC Analysis Cycle



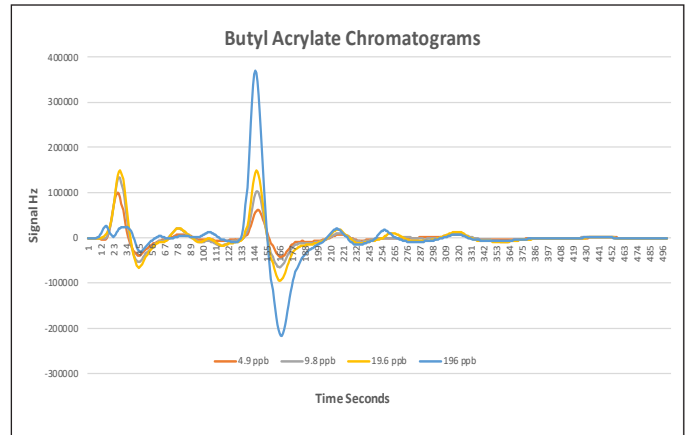
ANALYSIS SPECIFICATIONS

Butyl Acrylate

Measurement Range:	1.0 to 200ppb
Limit of Detection	1.0ppb
Analysis Time:	10 Minutes
Column:	0.53mm x 5m
Column Temperature:	+70°C
Amibent Temperature:	-10°C to +45°C
Power Input:	12 VDC @ 5A (max) 110-240 VAC
Analysis Precision:	±5%

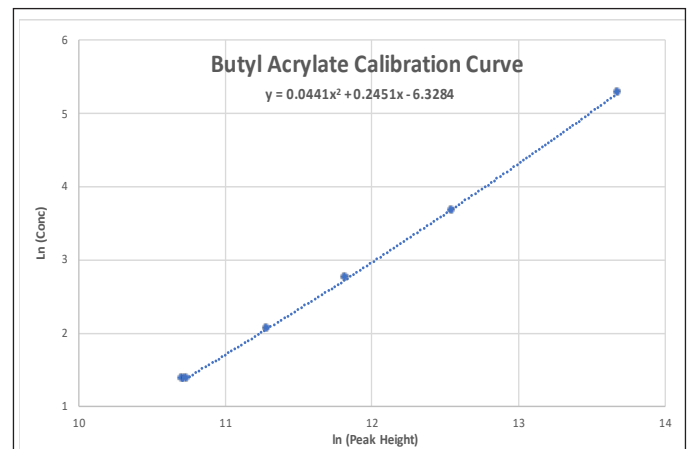
BUTYL ACRYLATE CHROMATOGRAMS

4.9ppb to 196ppb



BUTYL ACRYLATE CALIBRATION CURVE

Calibration Range 0.0ppb to 200ppb



eGC ORDERING INFORMATION

Contact ENMET's application team for additional information.



680 Fairfield Court
Ann Arbor, MI 48108 USA
PH: 734-761-1270
www.enmet.com