

「Application Note」

Analysis of VOCs Using ChroZen PAL Headspace and ChroZen GC/MS

- GC/MS Application



Analytical Conditions

GC Conditions

Column : DB-624

Oven : 40 °C (5 min), 10 °C/min, 240 °C (10 min)

Carrier Gas : He

Flow Rate : 1 mL/min

Inlet : Splitless

MS Conditions

Ion Source Temp. : 200 °C

Transfer-line Temp. : 250 °C

Headspace Autosampler Conditions

Agitator Stand-by Temp. : 40 °C

Syringe Stand-by Temp. : 50 °C

Incubation Time, Temp. : 20 min, 80 °C

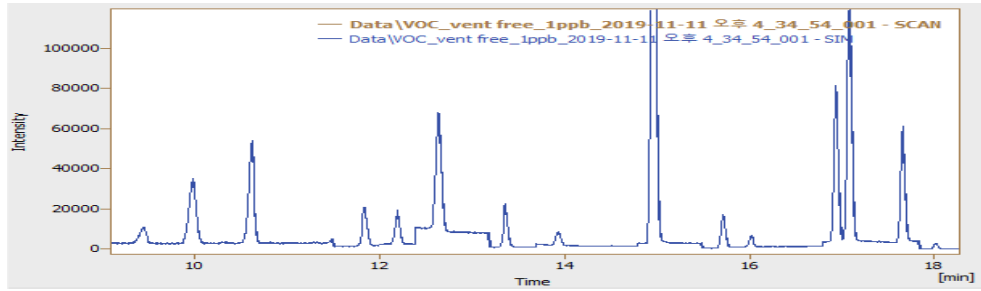
Agitator Speed : 250 rpm

Results

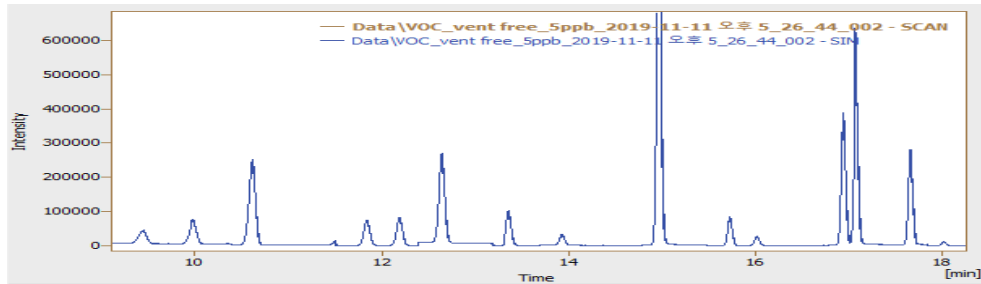
Selected Ions by ChroZen GC/MS

Compound	R.T [min]	SIM List [m/z]
1,1-DCE	9.457	61,96,98
DCM	9.993	84,86,51
Chloroform	11.85	83,85,87
1,1,1-TCE	12.201	97,99,61
Benzene	12.652	78,77
TCE	13.367	130,95
BDCM	13.939	83,85
Toluene	14.97	91,92
PCE	15.733	129,127
DBCM	16.025	166,164
Ethylbenzene	16.946	91,106
m,p-Xylene	17.088	91,106
o-Xylene	17.664	91,106
Bromoform	18.008	173,171

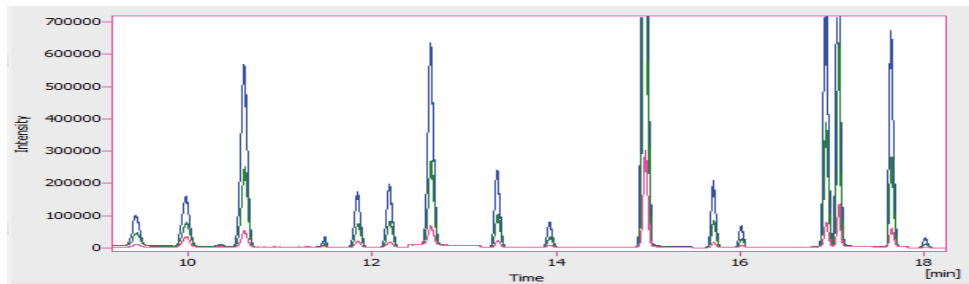
Chromatogram_SIM mode



<14 VOCs at 1ppb>



<14 VOCs at 5ppb>



<Chromatogram Overlay of 14 VOCs>