



## Analysis of VOCs in Drinking Water

### 1. Analytical Condition

#### YL6900 GC/MS System with a HS Sampler

Oven : 35 °C(7min) -> 10 °C/min to 80 °C(3min) -> 20 °C/min to 150 °C

Column : DB-5MS UI (30 m \* 0.25 mm \* 0.5 µm)

Injector : Capillary 250 °C

Carrier gas : He, 1 mL/min (Split ratio 10:1)

Ion Source: 200 °C

Transfer line : 250 °C

Scan range: 33-200

Emission current:: 50µA

EM Gain: 100000

#### Versa Headspace

Platen/Sample Temp: 80°C

Valve Oven Temp: 120 °C

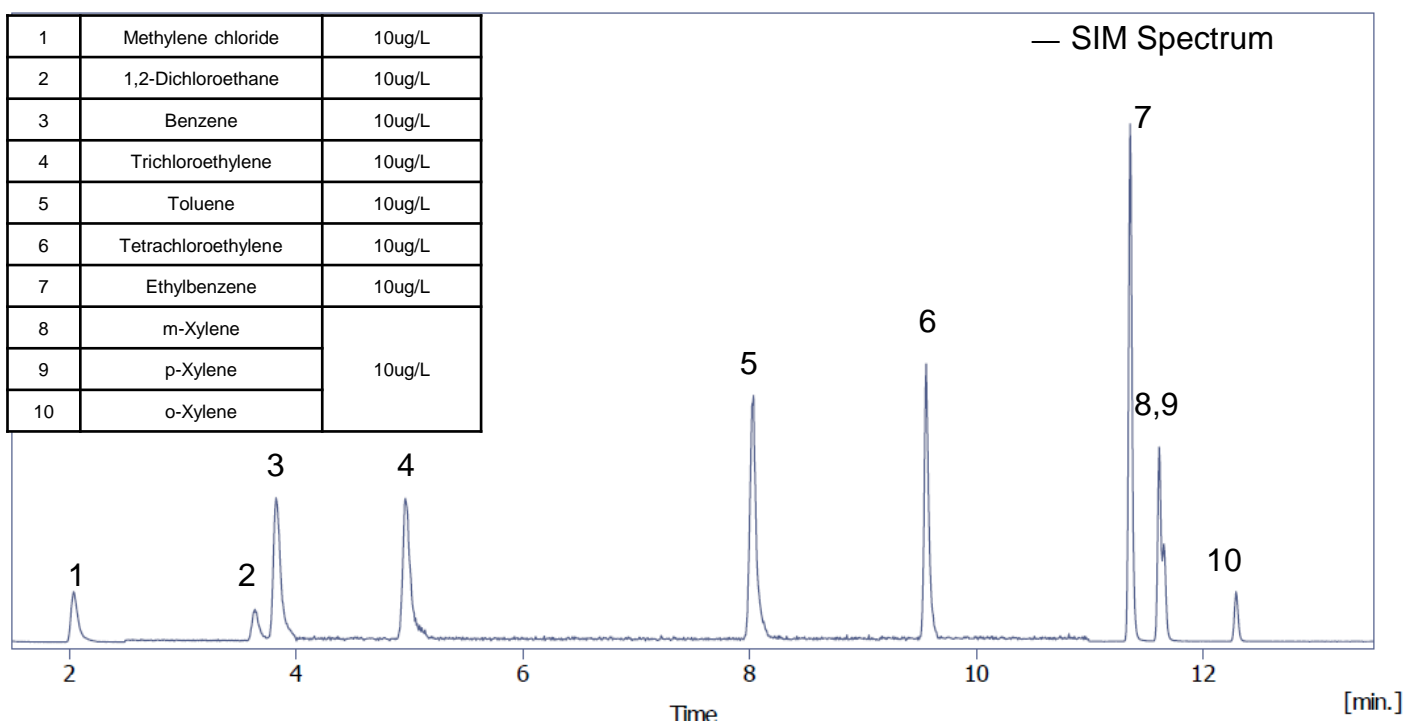
Transfer Line Temp: 140 °C

Sample Equil. Time: 30min

Injection volume: 1mL

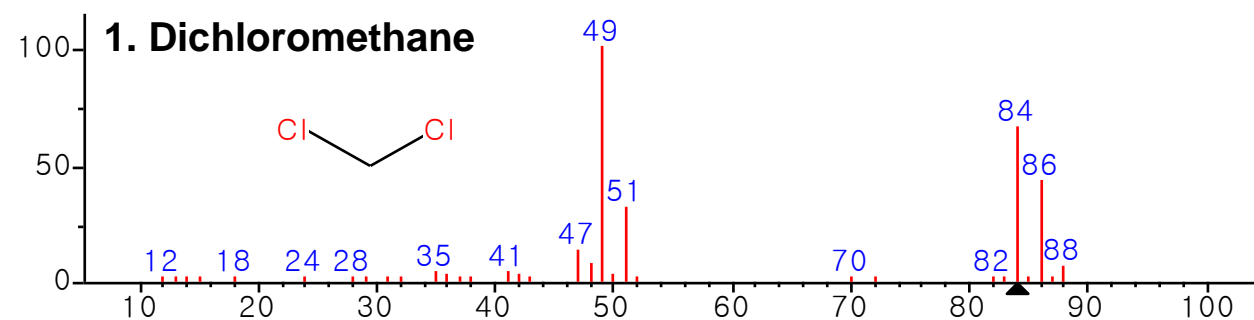
Sample volume: 5mL

### 2. Chromatogram (Scan Mode)

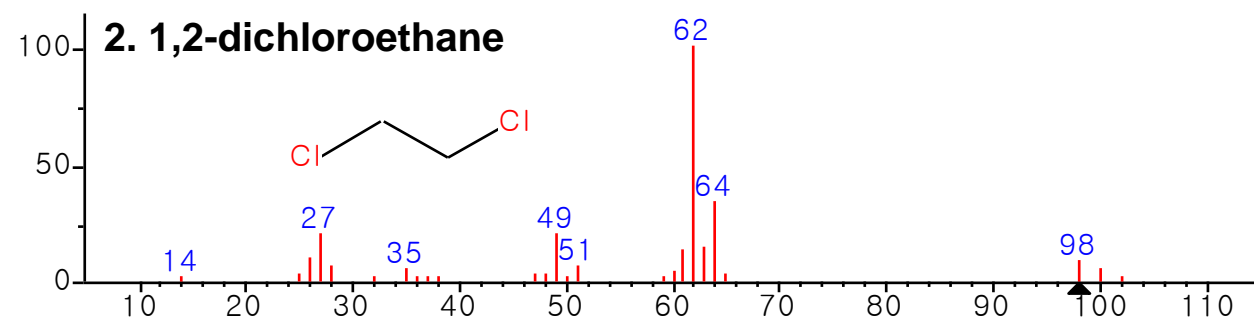


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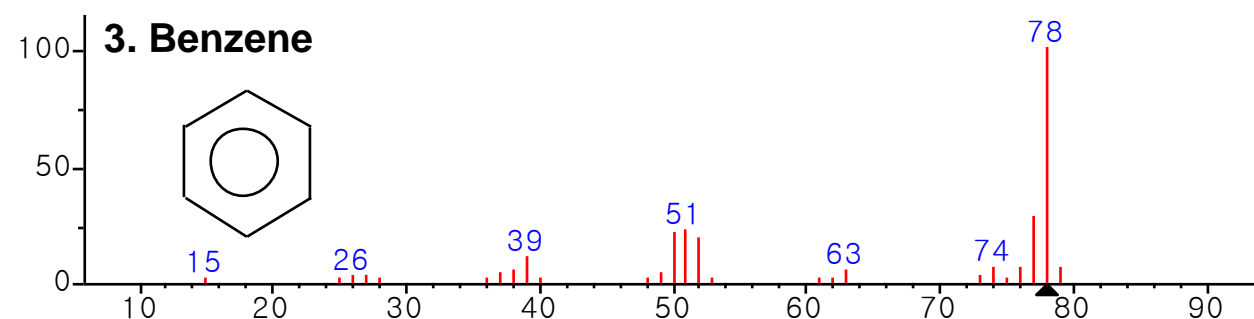
### 3. Spectra



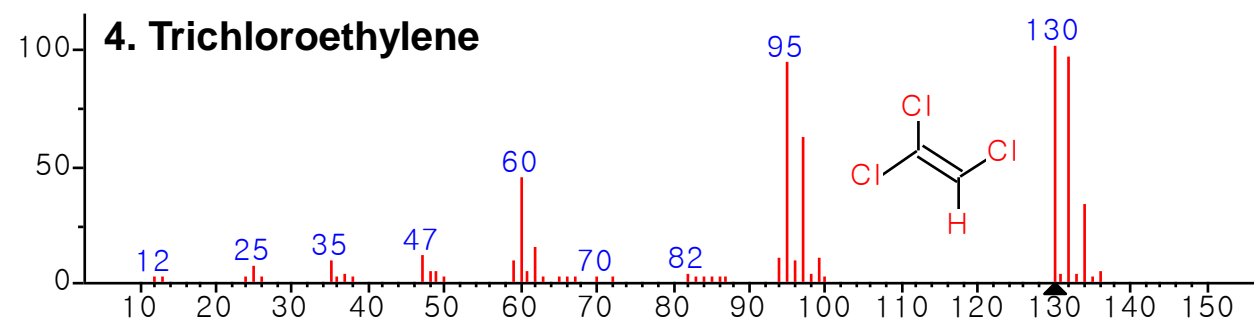
(mainlib) Methylene Chloride



(mainlib) Ethane, 1,2-dichloro-



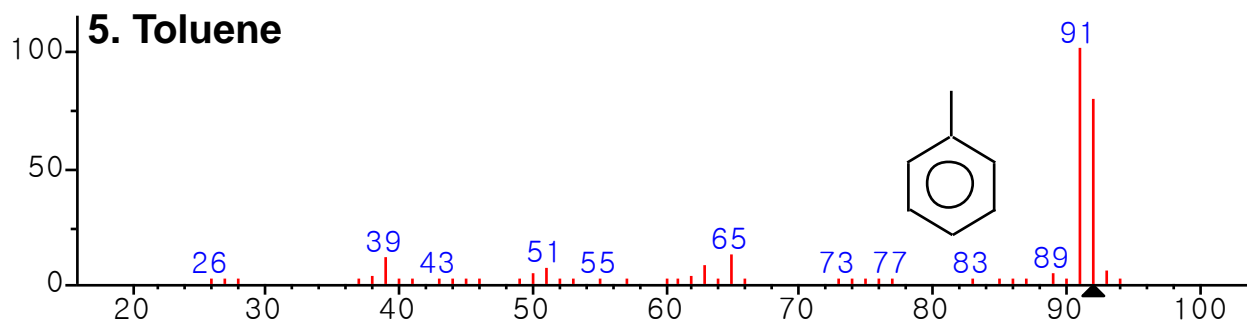
(mainlib) Benzene



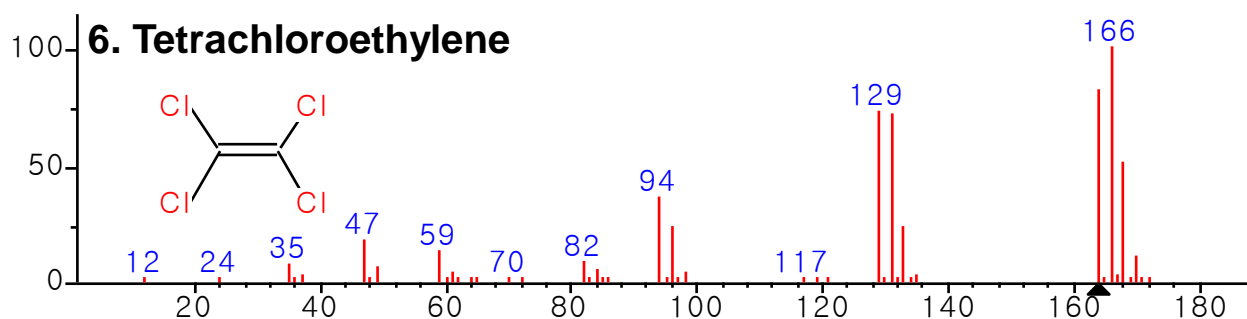
(mainlib) Trichloroethylene

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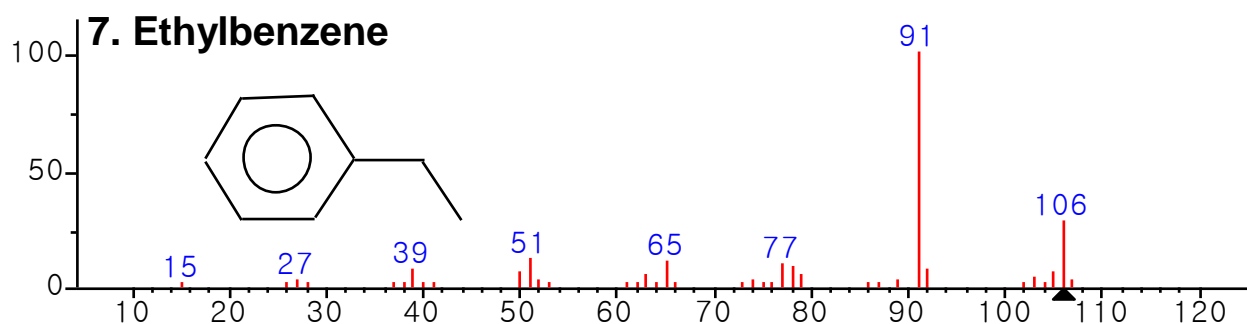
### 3. Spectra



(mainlib) Toluene



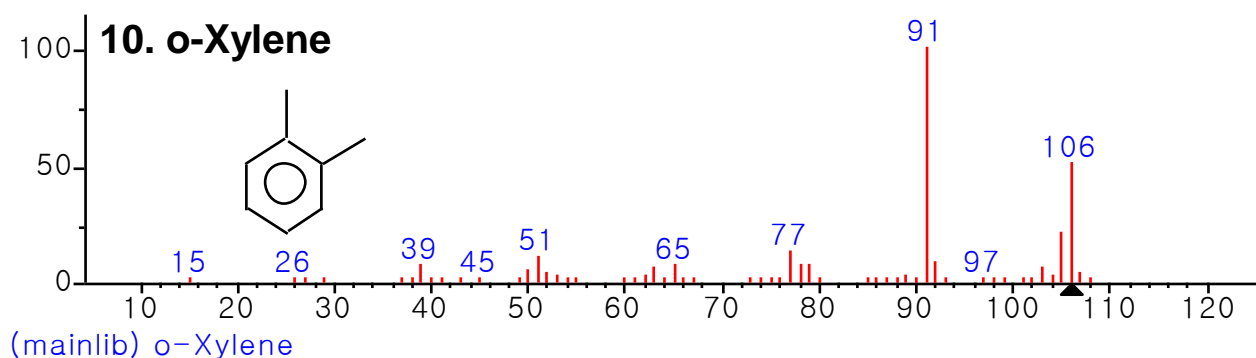
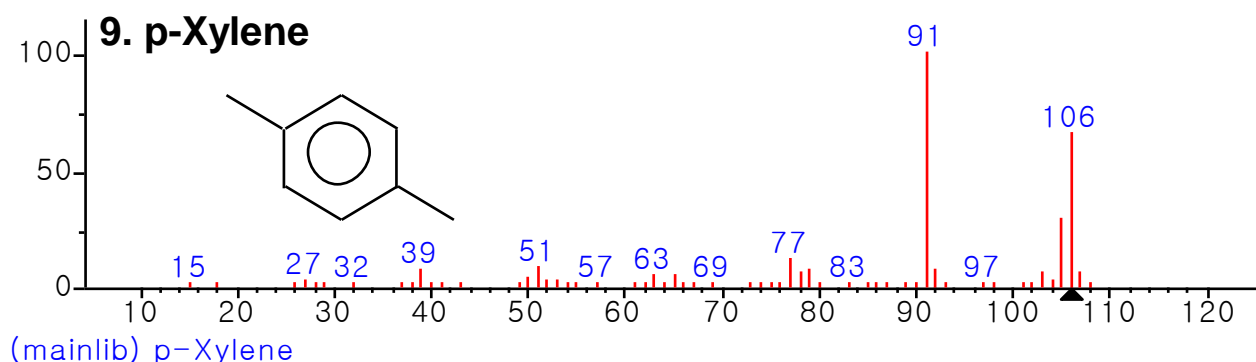
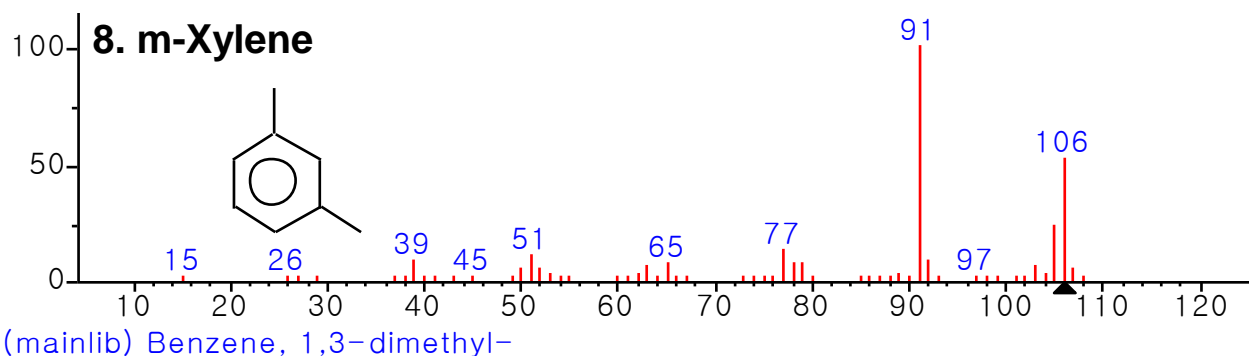
(mainlib) Tetrachloroethylene



(mainlib) Ethylbenzene

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### 3. Spectra





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### 4. Sim List

	Name	CAS No.	RT	Q1	Q2	Q3	Start Time(min)
1	Dichloromethane	75-09-2	2.028	49	84	86	0.00
2	1,2-dichloroethane	107-06-2	3.653	62	64	49	2.5
3	Benzene	71-43-2	3.83	78	51	63	
4	Trichloroethylene	79-01-6	4.973	130	132	95	4
5	Toluene	108-88-3	8.03	91	92	65	
6	Tetrachloroethylene	127-18-4	9.559	166	129	94	
7	Ethylbenzene	100-41-4	11.345	91	106	51	11
8	m-Xylene	108-38-3	11.617	91	106	51	
9	p-xylene	106-42-3	11.658	91	106	51	
10	o-xylene	95-47-6	12.279	91	106	51	