

Screening analysis of cigarettes' compounds using MonoTrap RGC18TD containing graphite carbon. No need for pre-conditioning with MonoTrap for TD.

Protocol

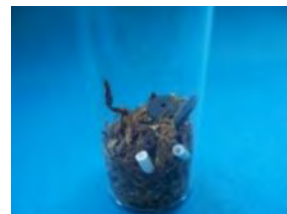
2 pcs of Cigarettes
2 different kinds

Unwrap the cigarettes and put the leaves into a vial

Head Space Sampling
MonoTrap RGC18TD x 1 pcs

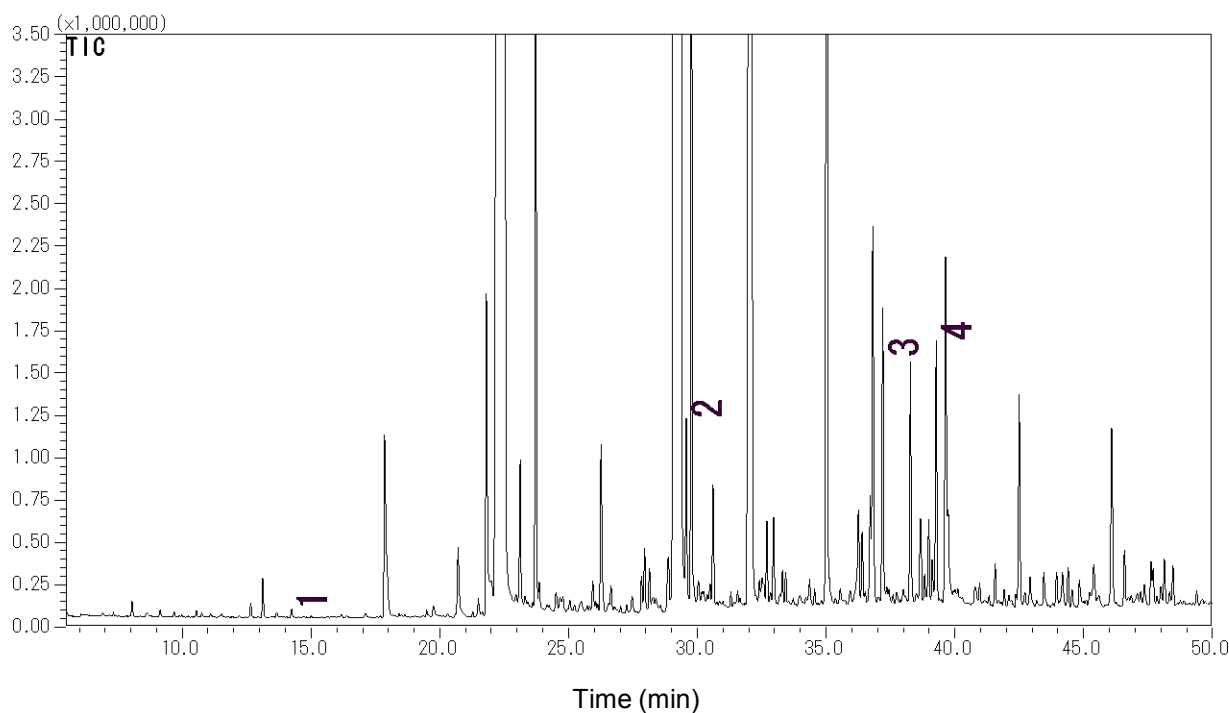
At 60 °C for 90 mins

TD/GC/MS



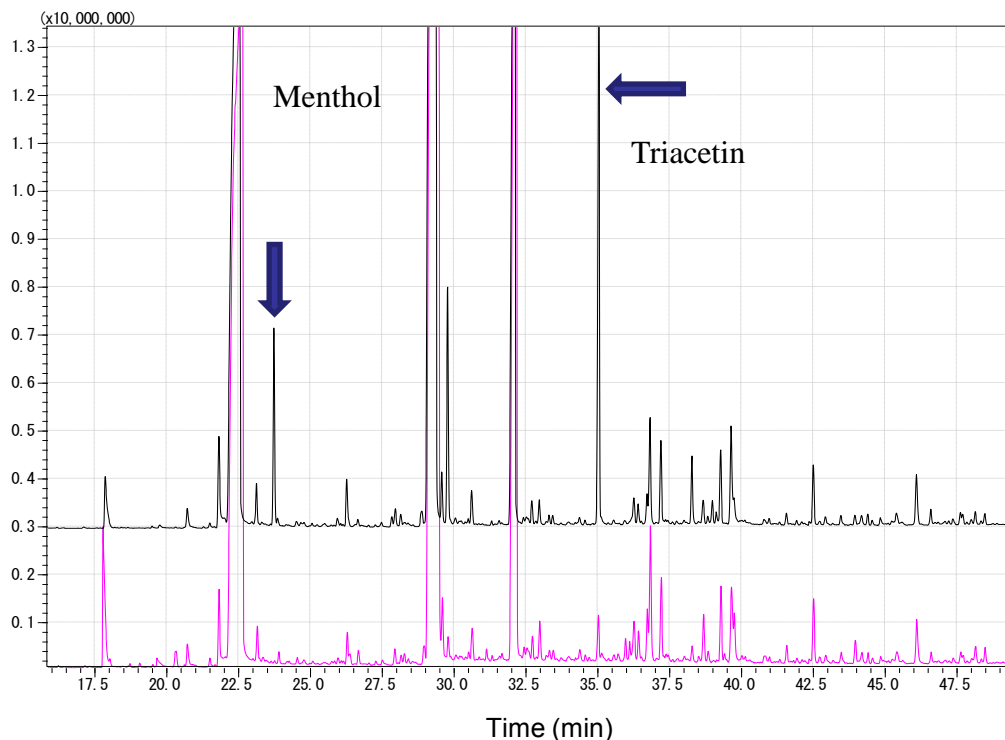
Trapping image

Cigarette A



1. 6-Methyl-5-heptene-2-one
2. *trans*-Geranylacetone
3. Megastigmatrienone
4. Megastigmatrienone

Aroma Compounds Comparison of 2 Different Kinds of Cigarettes



Cigarette A

Cigarette B

GC Conditions

System	: GC/MS-Thermal Desorption (T-Dex II)
Column	: InertCap Pure-WAX 0.25 mm I.D. × 30 m, df = 0.25 μm
Col.Temp.	: 40°C (5 min) - 4 °C/min- 250 °C
Carrier Gas	: He 1mL/min (constant flow)
Desorb Temp.	: 200 °C
Time	: 5 min
Flow	: 2 mL/min
Split	: Splitless
Cryo Trapping	: -160 °C
Injection Temp.	: 250 °C
Detection	: MS Scan (40 - 600 m/z)