

# Easy Concentration & Analysis of Maple Syrup by MonoTrap - Thermal Desorption

## Protocol

Maple Syrup

Put 20 g into a 40 mL vial

 Head Space Sampling  
 MonoTrap RGC18 TD × 1 pc

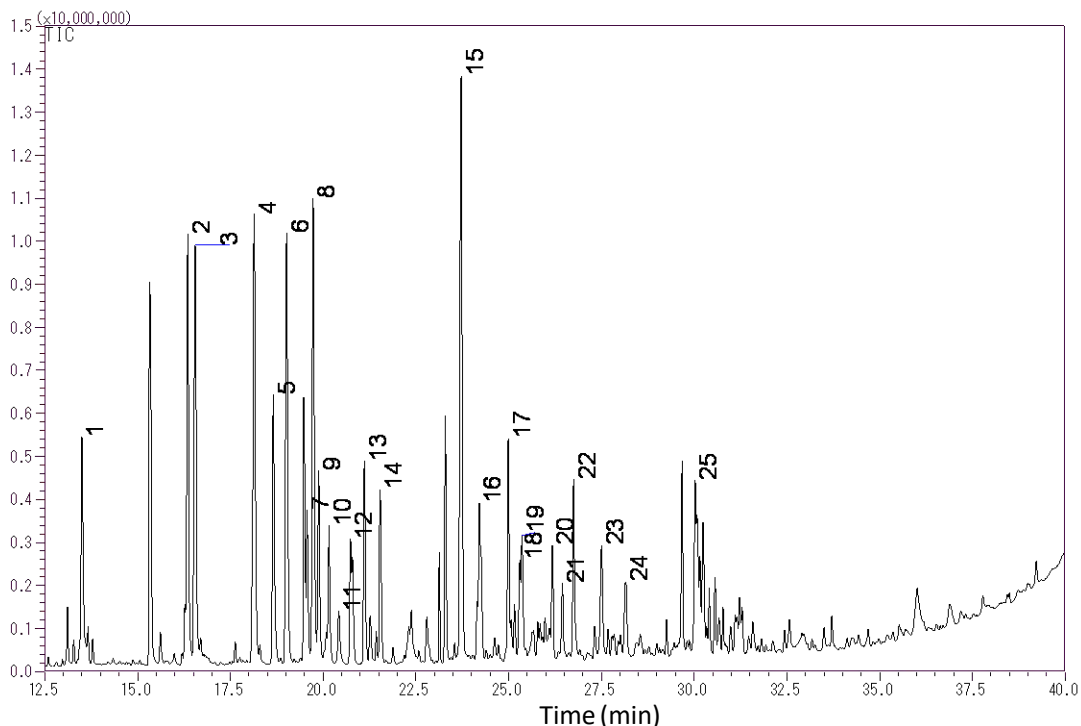
At 60 °C for 12 hours

TD/GC/MS

### GC Conditions

**System** : GC/MS-Thermal Desorption (T-Dex II)  
**Column** : InertCap Pure-WAX  
 0.25 mm I.D. × 60 m, df = 0.25 μm  
**Col.Temp.** : 40 °C (5 min) - 6 °C/min - 250 °C  
**Carrier Gas** : He, 1 mL/min (constant flow)

**Desorb Temp.** : 200 °C  
**Time** : 5 min  
**Flow** : 5 mL/min  
**Split** : 25 mL/min  
**Cryo Trapping** : -150 °C  
**Injection Temp.** : 250 °C  
**Detection** : MS Scan (*m/z* 28.5 - 600)



- |                               |   |
|-------------------------------|---|
| 1. Isobutyl alcohol           | 14. Trimethylpyrazine   |
| 2. D-Limonene                 | 15. 5-c-Acetyl-1,4-anhydro-2,6-dideoxy-1,4-dimethylhex-1-en-3-ulose |
| 3. Isopentyl alcohol          | 16. Thymine   |
| 4. Methylpyrazine             | 17. 2,3-Butanediol  |
| 5. Acetyl methyl carbinol     | 18. Propylene Glycol  |
| 6. Hydroxyacetone             | 19. 3-Methylenedihydro-2(3H)-furanone                               |
| 7. Dimethylpyrazine           | 20. <i>m</i> -Methoxytoluene  |
| 8. Dimethylpyrazine           | 21. 2-Acetyl-4-methylpyridine                                       |
| 9. Ethylpyrazine              | 22. 2-Furanmethanol   |
| 10. Dimethylpyrazine          | 23. 3-Ethyl-2-hydroxy-2-cyclopenten-1-one                           |
| 11. 2-Cyclopenten-1-one       | 24. 3-Methyl-2(5H)-furanone   |
| 12. 2-Methyl-2-cyclopentenone | 25. 2-Hydroxy-1-methylcyclopenten-3-one                             |
| 13. 2-Ethyl-6-methylpyrazine  |   |

\*Data provided by Library Search

**Products Line UP**



MonoTrap-TD Glass Tube



1050-74201 1050-73201

**MonoTrap-TD**

1050-73201 RSC18TD (ODS,SilicaGel) 30 pcs

1050-74201 RGC18TD (Graphite Carbon contained) 30 pcs

**MonoTrap-TD Glass Tube** 1003 -75001

Linex -MT Tube

1003 -75002 TD20/TDex/ATD-MT Tube

**Easy 3 Steps**

**1. Open the Ampoull**



Ready-to-use and pre-conditioned MonoTrap TD are delivered in amples .



**2. Sampling**



Samples:  
Flower, Food, Alcohol etc...

Hang the MonoTrap for TD in a tedlar bag or a vial to trap the target compounds. No need to use pumps.

● Head Space Sampling

● Stirring Sampling

● Passive Sampling



**3. Analysis**



Inert MonoTrap into a glass tube and GC•GC/MS

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