

# Concentration Analysis of Chocolate Flavor Components - Using MonoTrap Simple Enrichment Tools

MonoTrap RGC18TD, a simple enrichment tool was used to screen the flavor components in chocolate. MonoTrap RGC18TD is a dedicated heat-desorption cartridge, it is individually packaged in ampoules and does not require conditioning before use.

## Pretreatment procedure

Chocolate

In a single size  
place in 40 mL vials

### GC Conditions

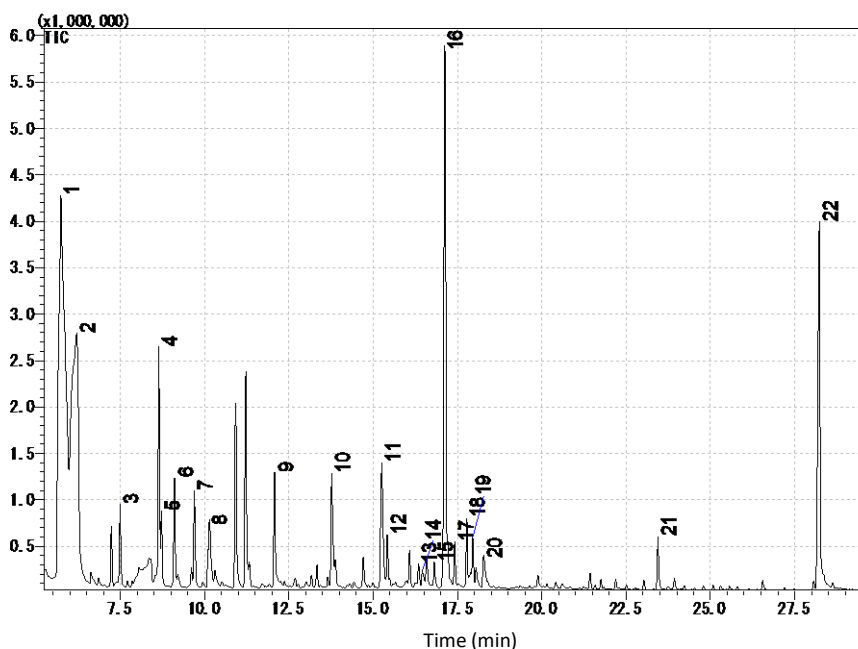
**System** : GC - MS - Thermal Desorption  
**Column** : InertCap 5MS/NP  
0.25 mm I.D. x 30 m, df = 0.25  $\mu$ m  
**Col.Temp.** : 40 °C (5 min) - 4 °C/min - 250 °C  
**Carrier Gas** : He, 1 mL/min (constant flow)

Collection (HS)  
One MonoTrap RGC18TD

At 60 °C for 15  
minutes

**Desorb Temp.** : 200 °C  
**Time** : 5 min  
**Mode** : Split (Split ratio 5:1)  
**Cryo Trapping** : -150 °C  
**Injection Temp.** : 200 °C  
**Detection** : MS Scan ( $m/z$  : 29-600)

TD/GC/MS



- |                        |                            |
|------------------------|----------------------------|
| 1. Butanediol          | 12. Methylheptyl acetate   |
| 2. Butanediol          | 13. Acetophenone           |
| 3. Methylbutyl acetate | 14. Acetylpyrrole          |
| 4. Isoamyl acetate     | 15. Ethyl dimethylpyrazine |
| 5. Methylbutyl acetate | 16. Tetramethylpyrazine    |
| 6. Heptanon            | 17. Nonanon                |
| 7. Heptanol            | 18. Linalool               |
| 8. Dimethyl pyrazine   | 19. Nonanal                |
| 9. Benzaldehyde        | 20. Phenylethyl alcohol    |
| 10. Trimethylpyrazine  | 21. Phenethyl acetate      |
| 11. Benzyl Alcohol     | 22. Vanillin               |

※According to library search results

## Products

### Absorbent

Description : MonoTrap RGC18TD  
 Cat.No. : 1050-74201

\* Shipped in ample tube.



MonoTrap RGC18TD



MonoTrap Trial Kit for TD

Contents	Cat.No.
<ul style="list-style-type: none"> <li>● MonoTrap TD 10 pcs (Select one from 3 types as below) MonoTrap RSC18 TD, RGC18 TD, RGPS TD</li> <li>● Glass Tube 1 pc ( Select a tube for OPTIC / LINE, or for T-Dex / ATD / TD-20)</li> <li>● MT Holder 1 pc</li> <li>● CLEAN PIN HOLE SEPTUM WITH VIAL 1 pc</li> </ul>	1050-07800

### GC Capillary Columns

Description : InertCap 5MS/NP  
 Size : 0.25 mm I.D. x 30 m, df = 0.25 μm  
 Cat.No. : 1010-18642



InertCap 5MS/NP

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