

# Concentration analysis of toothpaste flavor components - Using MonoTrap Simple Enrichment Tools

MonoTrap RGC18TD, a simple enrichment tool was used to screen and analyze the flavor components in toothpaste. MonoTrap RGC18TD is dedicated to heat desorption sampling, it is supplied individually packaged in ampoules and does not require conditioning prior to use.

## Preliminary processing procedure

Toothpaste

Put 1 g (approximately one dose) into a 40 mL vial.

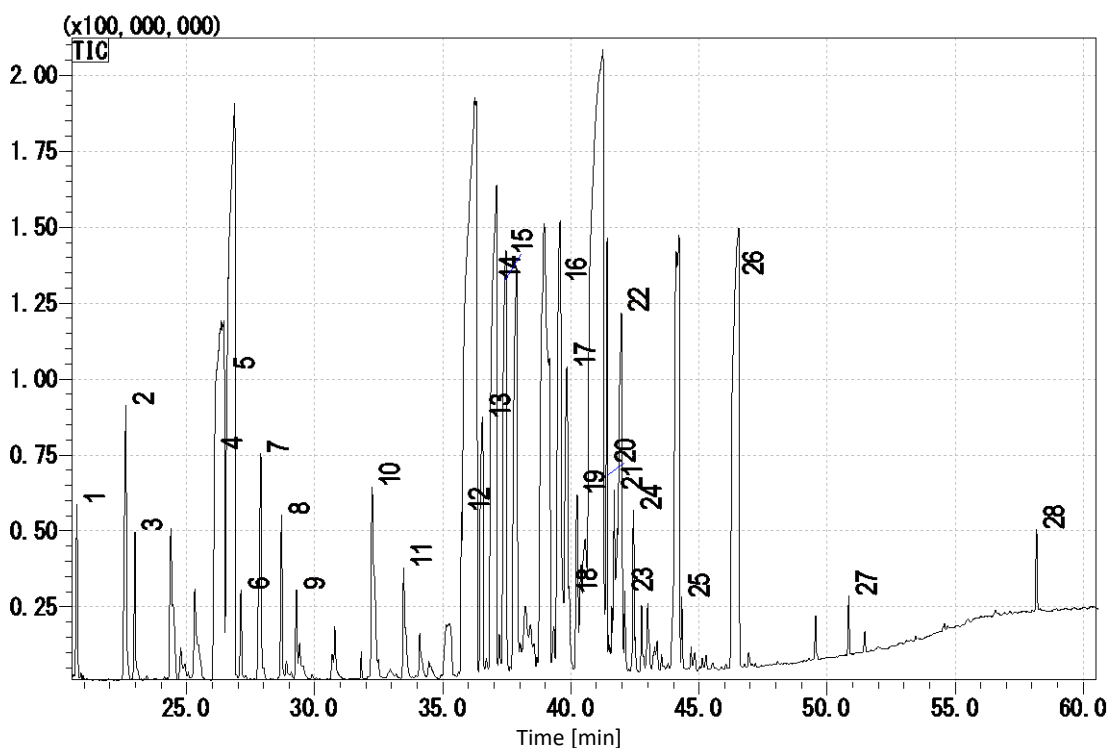
Collection (HS)  
One MonoTrap RGC18TD

36 °C for 10 minutes

TD/GC/MS

**Conditions**

<b>System</b>	: GC – MS - Thermal Desorption
<b>Column</b>	: InertCap Pure-WAX ProGuard 0.32 mm I.D. x 2 m + 120 m, df = 0.50 µm
<b>Col.Temp.</b>	: 40 °C (3.5 min) - 4 °C/min - 250 °C (20 min)
<b>Carrier Gas</b>	: He 2.5 mL/min (constant flow)
<b>Desorb Temp.</b>	: 200 °C
<b>Time</b>	: 5 min
<b>Mode</b>	: Split (Split ratio 5:1)
<b>Cryo Trapping</b>	: -150 °C
<b>Injection Temp.</b>	: 250 °C
<b>Detection</b>	: MS Scan ( <i>m/z</i> : 29 - 800)



1	Camphene	11	Camphor	21	Isomenthol
2	Fenchene	12	Ethyl hexanol	22	Estragole
3	Sabinen	13	Cinerson	23	Dihydrocarvyl acetate
4	Limonen	14	Menthone	24	Terpineol
5	Cineol	15	Dihydrocarveol	25	Anethol
6	Ocimene	16	Menthol	26	Estragole
7	Terpinolen	17	Terpineol	27	Menthyl lactate
8	Menthatriene	18	Bornyl acetate	28	Thymol
9	Terpinolene	19	Isopulegol		
10	Octanol	20	Caryophyllene		

\* 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 Pure-WAX  
Size : 0.32 mm I.D. x 2 m (ProGuard) + 120 m, df = 0.50  $\mu$ m  
Contact us for detail



InertCap Pure-WAX

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