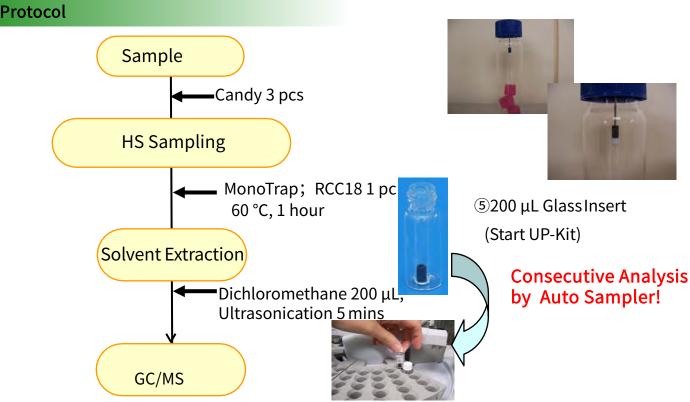
GT009

GL Sciences Inc.

# Easy Enrichment of Candy Fragrance by HS Method with MonoTrap

MonoTrap is a hybrid novel adsorbent that combines a large surface area and the properties of silica gel, activated carbon, and ODS. Due to the large surface area of porous silica and the adsorption effect caused by the inclusion of activated carbon, a high collection efficiency is obtained. Therefore, high-sensitivity analysis can be performed in a short time. In this study, MonoTrap RCC18 (with activated carbon) was used to perform simple enrichment analyses of the flavor components of candy by the HS-method. They were extracted with an insert vial for a commercial autosampler and subjected to continuous analysis as such. It is easy to screen without the need for dedicated MT Extract Cup or replacement of the extract. The highly inert WAX-column InertCap Pure-WAX is the optimal column for fragrance components analyses. It is recommended to use this medicine in conjunction with MonoTrap.



RCC18 and RSC18 can be used with existing auto sampler inert vials to elute without using the MT Extract Cup.

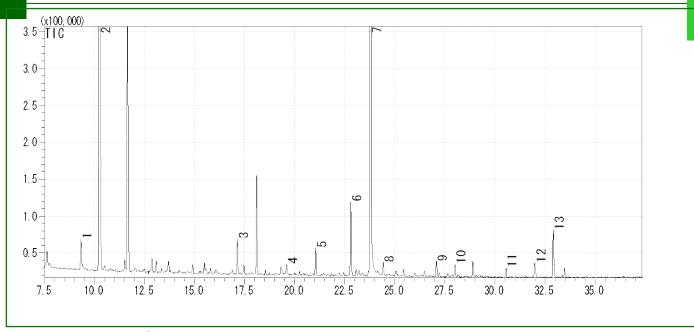
For example, with Shimadzu AOC20i+S, the combination of Shimadzu12  $\times$  32 mm standard screw vial (8-425) (GLS Cat.1030-17105) and §200  $\mu\text{L}$  glass insert can be used for a consecutive analysis as shown in the picture above, and it offers an easy operation from sampling to measurement. In order to avoid the contact of MonoTrap and a micro syringe, make sure to program that the deepest spot that the needle of micro syringe reaches is at least 6mm from the bottom of the vial.

## MonoTrap Convenient MonoTrap Start-UP-KIT

|   | Description                            | Qty. |
|---|--|------|
| 1 | MT Holder                              | 5    |
| 2 | MT Stand                               | 1    |
| 3 | MT Extract Cup withVial (20 mL)        | 5    |
| 4 | Clean Pin Hole Septum withvial (40 mL) | 5    |
| 5 | 200μL Glass Insert (FlatBottom)        | 40   |
| 6 | MonoTrap DCC18                         | 20   |
| 7 | MonoTrap RCC18                         | 20   |
| 8 | MonoTrap DSC18                         | 20   |
| 9 | MonoTrap RSC18                         | 20   |



#### GL Sciences GC Technical Note



- 1 β-Myrcene
- 2 Limonene
- 3 cis-3-Hexenol
- 4 Furfural
- 5 Decanal
- 6 β-Linalool
- 7 Propylene Glycol

- 8 Ethyl laevulinate
- 9 α-Terpineol
- 10 Citral
- 11 β-Damascenone
- 12 Benzyl Alcohol
- 13 Phenylethyl Alcohol

Red ··· Identification result of Standards

### **GC Condition**

System : SHIMADZU GC-2010、GCMS-QP2010,AOC20i+S
Column : InertCap Pure-WAX(Cat.1010-68142) 0.25 mm

I.D. $\times$ 30 m df=0.25  $\mu$ m

**Column Temp**:  $40 \,^{\circ}\text{C} \, (5 \, \text{min}) \rightarrow 6 \,^{\circ}\text{C/min} \rightarrow 250 \,^{\circ}\text{C} \, (5 \, \text{min})$ 

Carrier Gas : He 95 kPa

**Injection** : Split /Splitless,1  $\mu$ L 250 °C

**Detection** : MS Scan (m/z: 55-400)

Ultra inert WAX column InertCap Pure-WAX is highly recommended to analyze aromatic compounds together with MonoTrap

GL Sciences disclaims any and all responsibility for any injury or damage which may be caused by this data directly or indirectly. We reserve the right to amend this information or data at any time and without any prior announcement.

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