Easy Enrichment of Sesame Oil Fragrance with MonoTrap

**Protocol**

1. **Sample**
   - Sesame oil

2. **Trapping (Head Space)**
   - MonoTrap: RCC18pcs @ 60°C for 2 hours

3. **Solvent Extraction**
   - Dichloromethane 200 μL Ultrasonication for 5mins

4. **GC/MS**
   - SHIMADZU GC-2010, GCMS-QP2010
   - Column: InertCap Pure-WAX Cat.1010-68142
     - 0.25mmI.D. × 30m df=0.25 μm
   - Column Temp: 40°C (5min) → 4°C/min → 250°C (5min)
   - Carrier Gas: He 70kPa
   - Injection: Splitless, 1 μL
     - 250°C
   - Detection: MS Scan (m/z;35–450)

**GC/MS Condition**

- **System**: SHIMADZU GC–2010, GCMS–QP2010
- **Column**: InertCap Pure–WAX Cat.1010–68142
  - 0.25mmI.D. × 30m df=0.25 μm
- **Column Temp**: 40°C (5min) → 4°C/min → 250°C (5min)
- **Carrier Gas**: He 70kPa
- **Injection**: Splitless, 1 μL
  - 250°C
- **Detection**: MS Scan (m/z;35–450)

**MonoTrap series lineup**

<table>
<thead>
<tr>
<th>Cat.No.</th>
<th>Product</th>
<th>Shape</th>
<th>Size</th>
<th>Active Carbon</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1050-72101</td>
<td>MonoTrap DCC18</td>
<td>Disk</td>
<td>O.D.10mmx thick 1mm</td>
<td>Yes</td>
<td>C18</td>
</tr>
<tr>
<td>1050-72201</td>
<td>MonoTrap RCC18</td>
<td>Rod</td>
<td>O.D.2.9 mmx.1mm xHeight 5mm</td>
<td>Yes</td>
<td>C18</td>
</tr>
<tr>
<td>1050-71101</td>
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</tr>
</tbody>
</table>

http://www.gls.co.jp/gc.html
1 Ethylbenzene
2 Methyl ethyl disulfide
3 3-Methylphenol
4 Pyridine
5 2-Heptanone
6 Heptanal
7 Pyrazine
8 2-Methylpyridine
9 Thiazole
10 1-Pentanol
11 Methylpyrazine
12 4-Methylthiazole
13 2,4-Dimethylthiazole
14 Octanal
15 2,5-Dimethylthiazole
16 2,5-Dimethylpyrazine
17 2,6-Dimethylpyrazine
18 Ethylpyrazine
19 2,3-Dimethylpyrazine
20 2-Cyclopenten-1-one
21 5-Ethyl-2-methyl-1,3-thiazole
22 1-Hexanol
23 4,5-Dimethylthiazole
24 Dimethyl trisulfide
25 Methyl isopentyl disulphide
26 2-Ethyl-6-methyl-pyrazine
27 2,4-Dimethyl-4,5-dihydro-1,3-thiazole
28 2-Ethyl-5-methyl-pyrazine
29 Acetdimethylamide
30 Trimethylpyrazine
31 2-Methyl-2-thiazoline
32 Vinylpyrazine
33 2,5-Dimethyl-3-ethylpyrazine
34 Acetic acid
35 Furfural
36 Acetol acetate
37 2-Acetylfuran
38 Benzaldehyde
39 Pyrrole
40 Ethyl isopropyl ketone
41 Propanoic acid
42 Furfuryl acetate
43 Tetrahydrothiophen-3-one
44 Hydrazine, methyl ester
45 2-Formyl-5-methylfuran
46 3,5-Octadien-2-one
47 2-Acethylpyridine
48 Butyro lactone
49 2-Acetyl-3,4,5,6-tetrahydropridine
50 Acetylpyrazine
51 tetrahydrothiophene-2-one
52 Isopropenylpyrazine
53 Acetophenone
54 Furfuryl alcohol
55 Ethyl n-propyl disulfide
56 2-Acetyl-3-methylpyrazine
57 2-Isopropyl-4-methylthiazole
58 (5-Methyl-2-furyl)methanol
59 2(5H)-Furanone
60 Acetamide
61 Acetamidoethane
62 Propanamide
63 Furfuryl methyl disulfide
64 Guaiacol
65 2-Acetylpyrrole
66 Pyrrole-2-carboxaldehyde

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