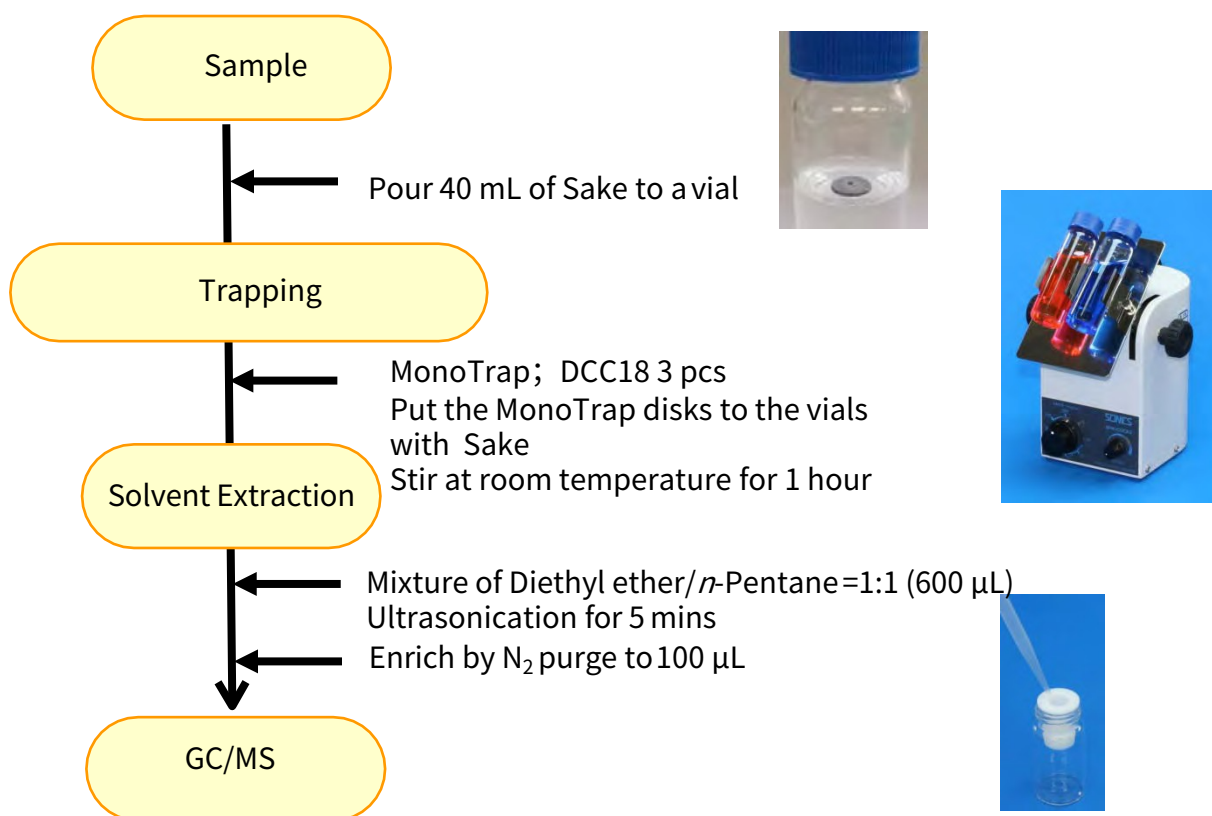


Easy Enrichment of Japanese Rice Wine (Sake) Fragrance with MonoTrap

MonoTrap is a hybrid novel adsorbent that combines large surface area and properties of silica gel, activated carbon, and ODS. In this study, we used MonoTrap DCC18 (with activated carbon) to perform simple enrichment analyses of the fragrance components of Japanese sake. The brand of use is Dai-jinjinzo liquor produced in Yamagata Prefecture. We were able to easily analyze the enrichment by simple operation of placing it in a vial with the sample. Due to the large surface area, high sensitivity of many information was obtained even in solvent extraction, where sample loading is large and dilution is a concern.

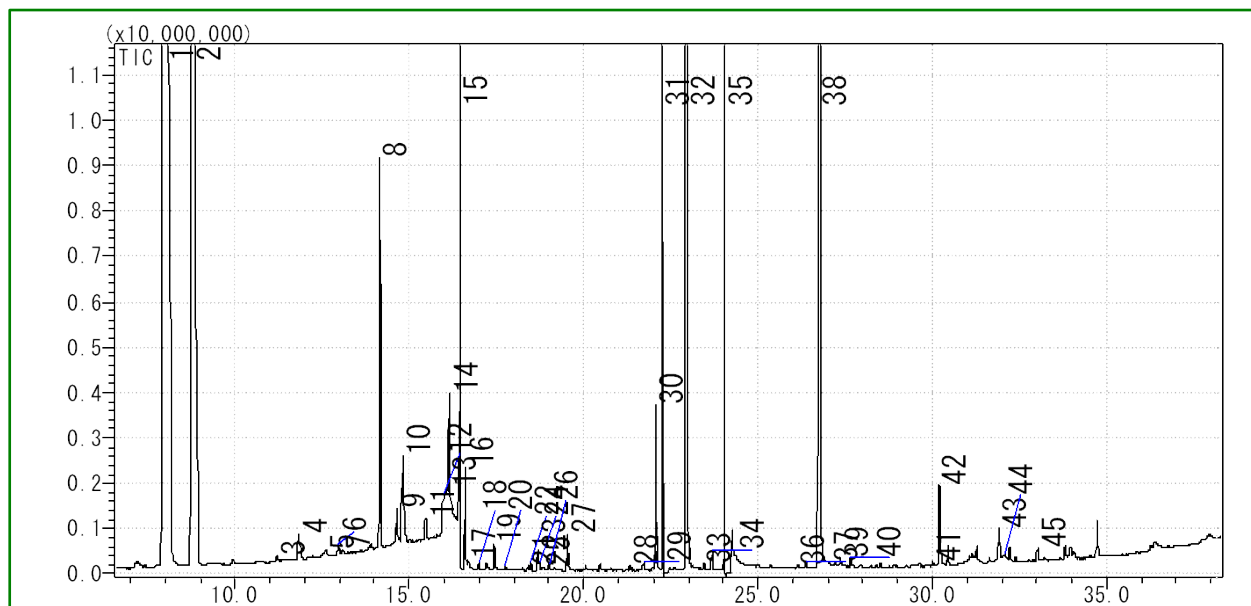
Column : InertCap Pure-WAX 0.25 mm I.D. × 30 m df=0.25 μm

Protocol



GC Condition

System	: SHIMADZU GC-2010, GCMS-QP2010
Column	: InertCap Pure-WAX Cat.1010-68142 0.25 mm I.D. × 30 m df=0.25 μm
Column Temp	: 50 °C (5 min) → 6 °C/min → 250 °C (5 min)
Carrier Gas	: He 90 kPa
Injection	: Splitless, 1 μL 250 °C
Detectio	: MS Scan (<i>m/z</i> ; 35-450)



- | | |
|---------------------------------------|---------------------------------------|
| 1 Isopentyl alcohol | 23 Hexanoic acid |
| 2 Ethyl caproate | 24 Ethyl decanoate |
| 3 2-Heptanol | 25 Benzeneacetaldehyde |
| 4 Ethyl lactate | 26 2-Propenoic acid |
| 5 3-Ethoxy-1-propanol | 27 Diethyl succinate |
| 6 2-Nonanone | 28 β -Citronellol |
| 7 Nonanal | 29 Benzeneacetic acid ethyl ester |
| 8 Ethyl octanoate | 30 3-Hydroxybutanoic acid ethyl ester |
| 9 1-Heptanol | 31 β -Phenethyl acetate |
| 10 Acetic acid +Furfural | 32 Hexanoic acid |
| 11 2-Ethyl-1-hexanol | 33 Benzyl Alcohol |
| 12 Ethyl Acetate | 34 Ethyl 3-hydroxytridecanoate |
| 13 Ethyl-3-hydroxybutyrate | 35 Phenylethyl Alcohol |
| 14 Benzaldehyde | 36 4-Oxononanal |
| 15 3-Methoxy-1,2-propanediol | 37 Isopentyl hexanoate |
| 16 2,3-Butanediol | 38 Octanoic Acid |
| 17 Ethyl 2-hydroxy-4-methylpentanoate | 39 Ethyl 3-hydroxytridecanoate |
| 18 1-Octanol | 40 Tributyl phosphate |
| 19 2,3-Butanediol | 41 α -Methylbenzeneethanamine |
| 20 Propylene Glycol | 42 n-Decanoic acid |
| 21 2-Ethyl-1,3-dioxolane | 43 4-Ethoxy-4-oxobutanoic acid |
| 22 Butyrolactone | 44 Coumaran |
| | 45 1-Methyldecylamine |

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