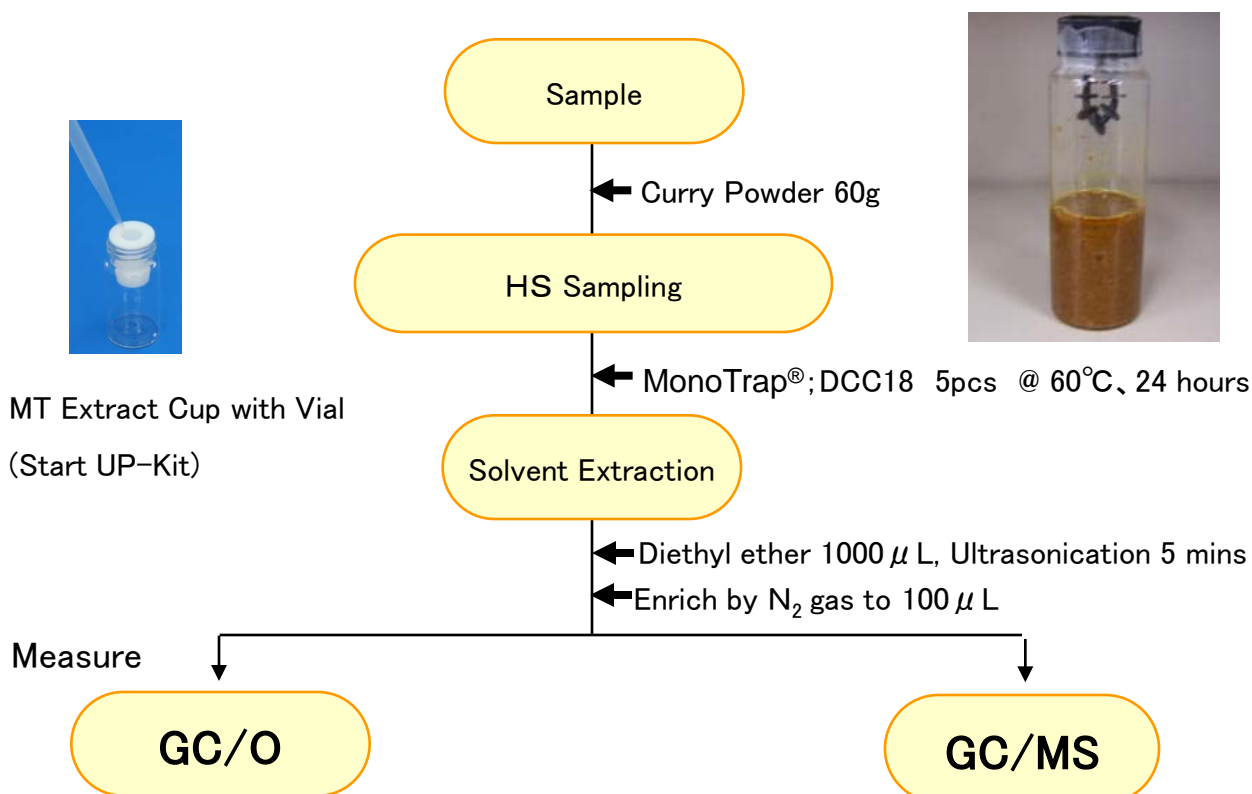
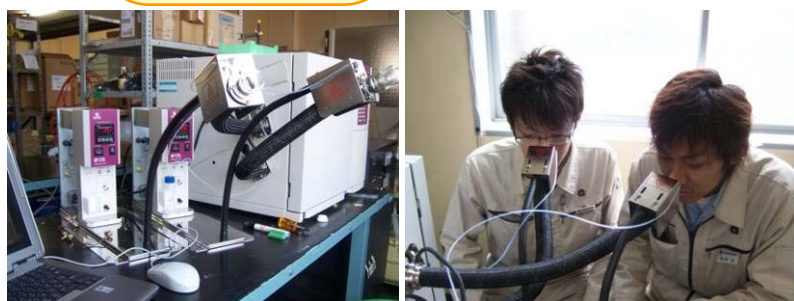


Protocol



MT Extract Cup with Vial
(Start UP-Kit)



Sniffing Port OP275 and OPV277 (GC/O) Operatable by 2 Persons

A unique combination of the OP275 and OPV277 system (GC/O system) offers an objective judgment of smell by having 2 persons simultaneously smell the fragrance in order to have more accuracy and sensitivity.

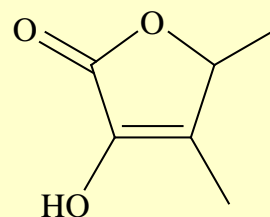
GC/O system OPV277set and OP275 is a sniffing Port with software for the simultaneous operation by 2 persons.

Please contact us for OP275 and OPV277.

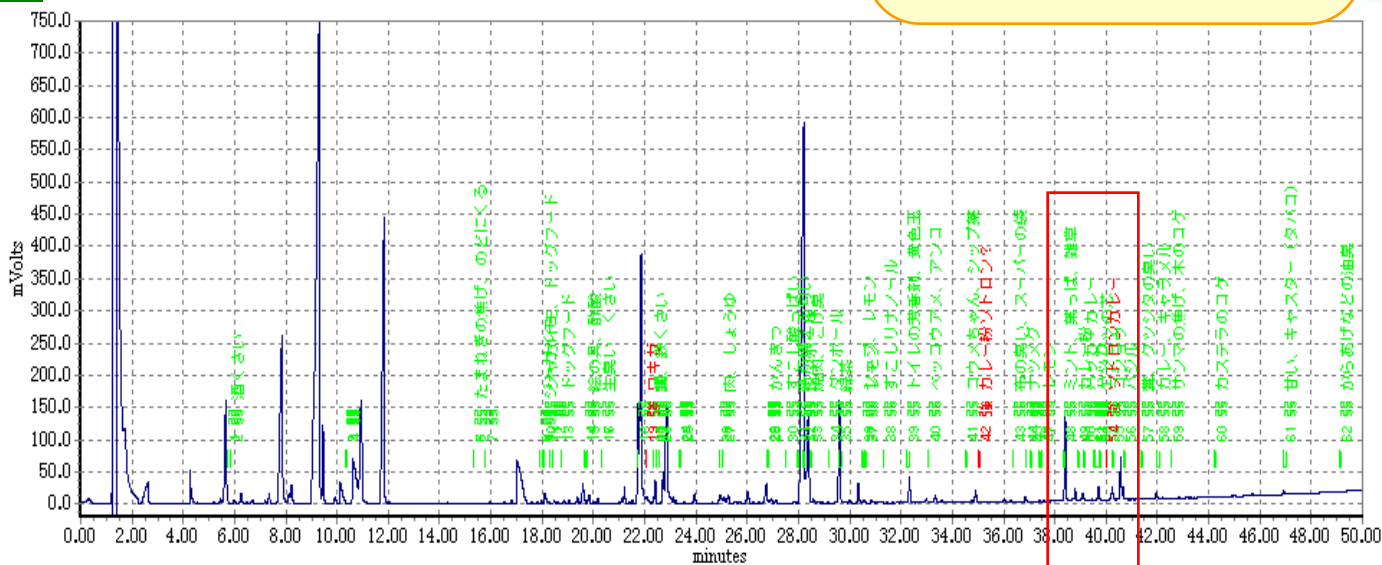
http://www.gls.co.jp/product/several_pdf/g/g2_opv277_vps278.pdf

GC/MS

Sotolone



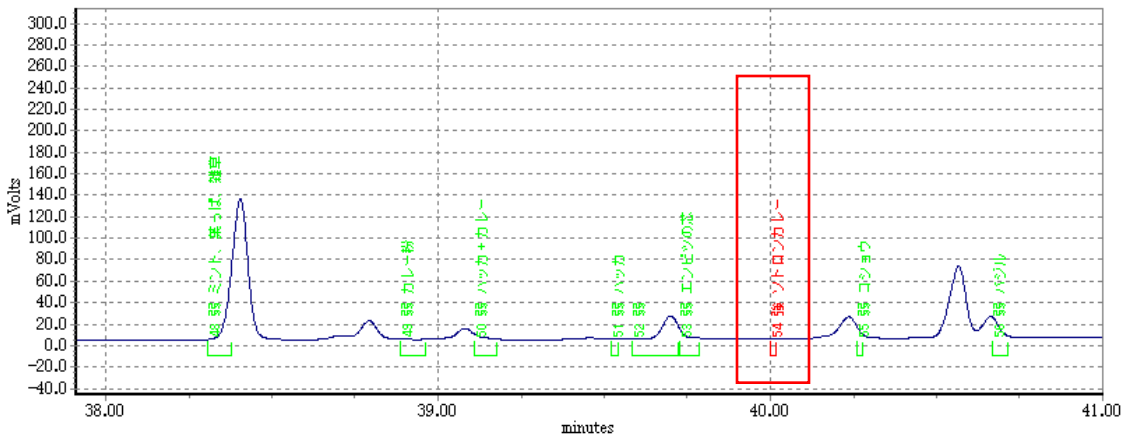
Fragment Ion;83,55,128



No.	Start [min]	Finish [min]	Level	Operator # 1	Operator # 2
1	5.837	5.839	Weak	Alcohol	Alcohol
2	15.293	15.296	Weak	Overcooked onion	A smell that hurts throat
3	18.014	18.017	Weak	Potato	Potato
4	18.074	18.077	Weak	Potato	Dog food
5	18.73	18.733	Weak	Dog food	Dog food
6	19.745	19.748	Weak	Paint	Acetic Acid
7	20.326	20.329	Weak	Fishy	Odor
8	22.04	22.043	Strong	Odor	Odor
9	22.324	22.327	Weak	Fecal	Fecal
10	22.357	22.359	Weak	Iron	Iron
11	25.009	25.013	Weak	Meat	Soy Source
12	26.82	26.82	Weak	Citrus	Citrus
13	27.471	27.488	Weak	Vinegar	Vinegar
14	27.962	27.977	Weak	Burning Paper	Burning Paper
15	28.165	28.199	Weak	Carton Box	Carton Box
16	28.453	28.529	Weak	BBQ	Overcooking
17	29.18	29.19	Weak	Carton Box	Carton Box
18	29.557	29.701	Weak	Green Tea	Green Tea
19	30.477	30.521	Weak	Wet compress	Lemon
20	30.572	30.656	Weak	Lemon	Lemon
21	31.317	31.333	Weak	Linalool	Linalool
22	32.21	32.315	Weak	Bathroom	Bathroom
23	33.041	33.07	Weak	Fragrance	Fragrance
24	34.5	34.562	Weak	Candy	Bean Jam
25	35.003	35.045	Strong	Plum	Wet compress
26	36.3539	36.382	Weak	Curry powder	Curry powder
27	36.865	36.895	Weak	Cloth	Plastic bag
28	37.479	37.49	Weak	Nutmeg	Nutmeg
29	38.304	38.376	Weak		Lemon
30	38.885	38.962	Weak	Mints	Leaves
31	39.107	39.174	Weak	Curry powder	Curry powder
32	39.52	39.542	Weak	Corn mint + curry	Corn mint + curry
33	39.726	39.784	Weak	Corn mint	Corn mint
34	40.001	40.015	Strong	Pencil	Pencil
35	40.26	40.279	Weak	Sotolon/Curry	Sotolon/Curry
36	40.67	40.716	Weak	Black pepper	Black pepper
37	41.363	41.387	Weak	Basil	Herb
38	42.002	42.067	Weak	Fecal	Sox
39	42.538	42.564	Weak	Curry	Caramel
40	44.228	44.302	Weak	Burned fish	Burned wood
41	46.908	47.038	Weak	Overcooked Pancake	Overcooked Pancake
42	49.121	49.161	weak	sweet	Cigarette
				Oil	Oil

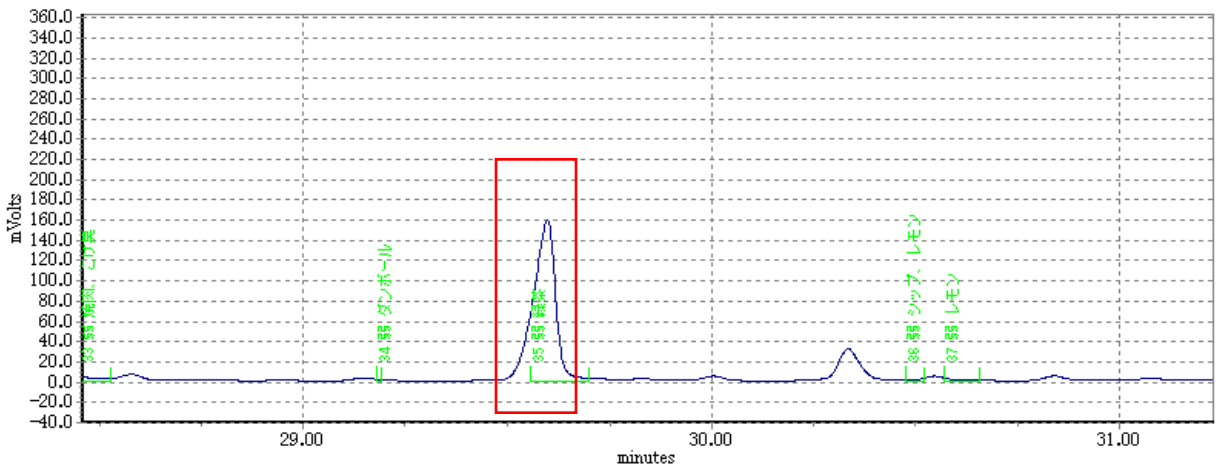
GC/O Condition
System : GC-4000,OPV277
Column : InertCap Pure-WAX
 0.25mmI.D. × 30m df=0.25 μ m
Column Temp : 40°C (5min) → 4°C/min → 250°C (5min)
Carrier Gas : He 1ml/min
Injection : Split/Splitless
 250°C, 1 μ L
Detection : FID

With multiple sniffing operators, it is possible to obtain an analysis with higher sensitivity and accuracy.



Q:カレ-24時間.chr

The small amount of curry fragrance that was not detected with FID was detected by GC/O with 2 operators. This compound is presumed as sotolon by sensory test.



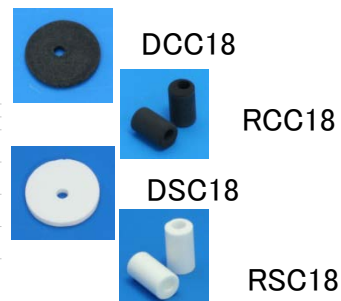
Q:カレ-24時間.chr

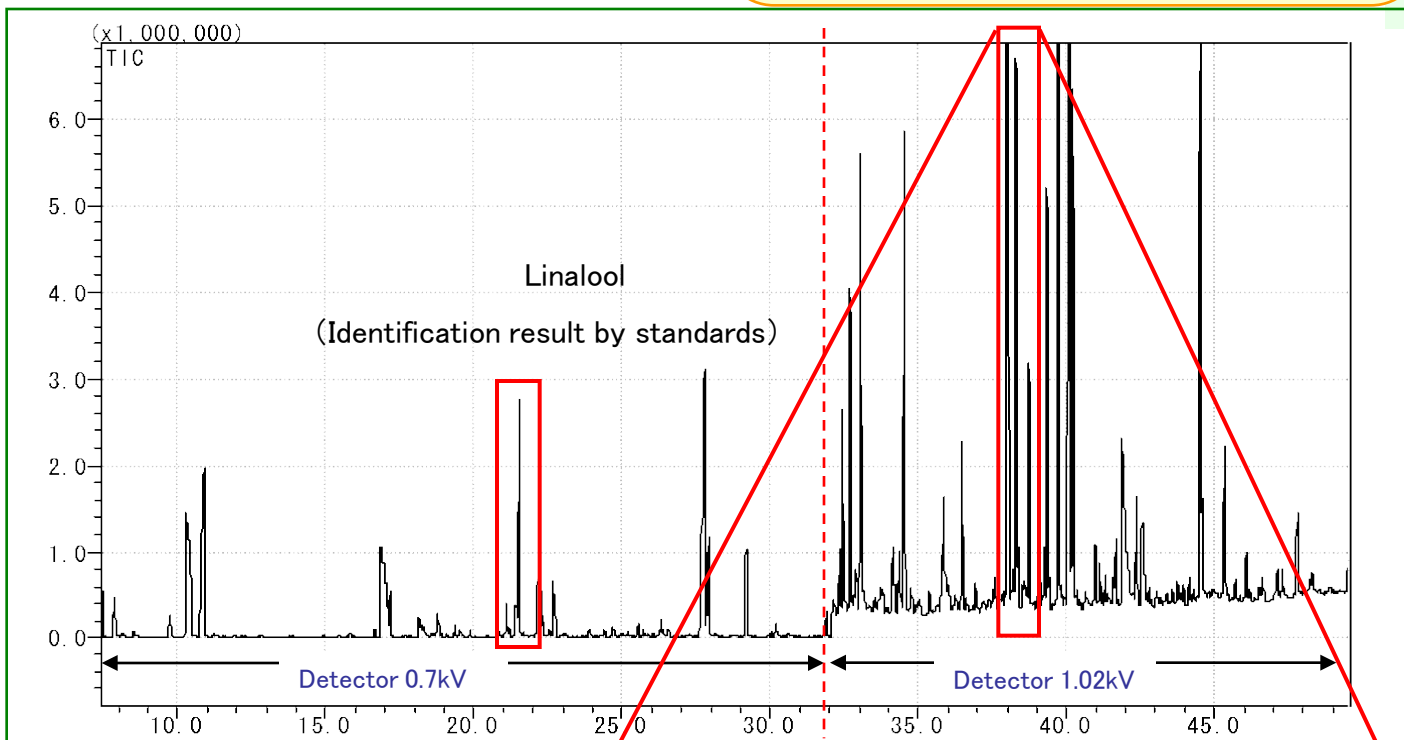
This is a data that 2 operators confirmed the smell of strong green tea by GC/O. This compound is presumed as linalool by sensory test.

Linalool is contained in green tea, and also a main compound of cilantro fragrance that is in curry powder etc.

MonoTrap® Series

cat.No	Description	Shape	Size	Active Carbon	Functional Group
1050-72101	MonoTrap DCC18	Disk	O.D.10mmx thick 1mm	Yes	C18
1050-72201	MonoTrap RCC18	Rod	5mm	Yes	C18
1050-71101	MonoTrap DSC18	Disk	O.D.10mmx thick 1mm	No	C18
1050-71201	MonoTrap RSC18	Rod	5mm	No	C18





GC/MS Condition

System : SHIMADZU GC-2010, GCMS-QP2010

Column : InertCap Pure-WAX

0.25mm I.D. × 30m df=0.25 μm

Column Temp : 40°C (5min) → 4°C/min → 250°C

Carrier Gas : He 95kPa

Injection : Split/Splitless

250°C, 1 μL

Detection : MS m/z; 35-400

