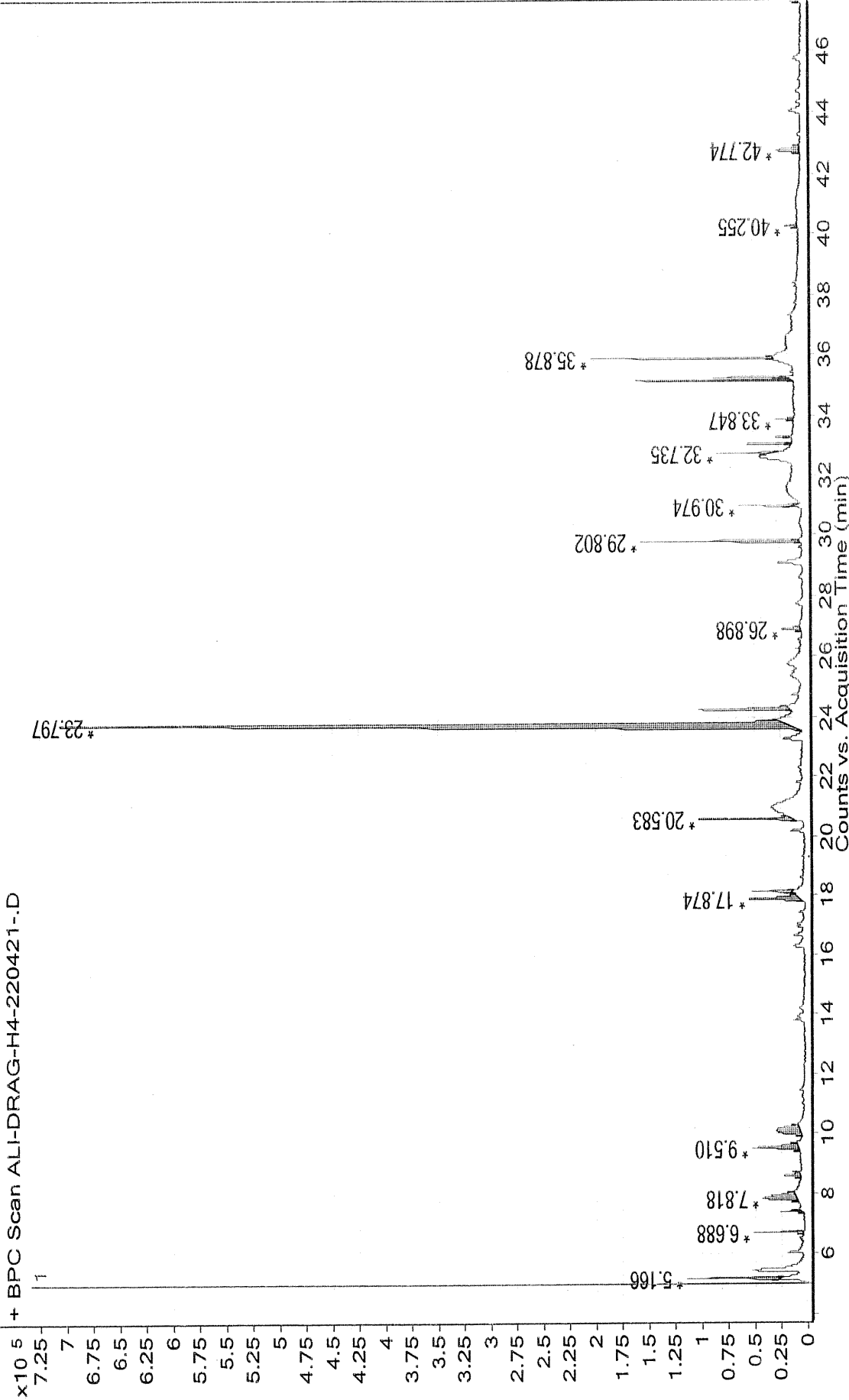


π

PMI



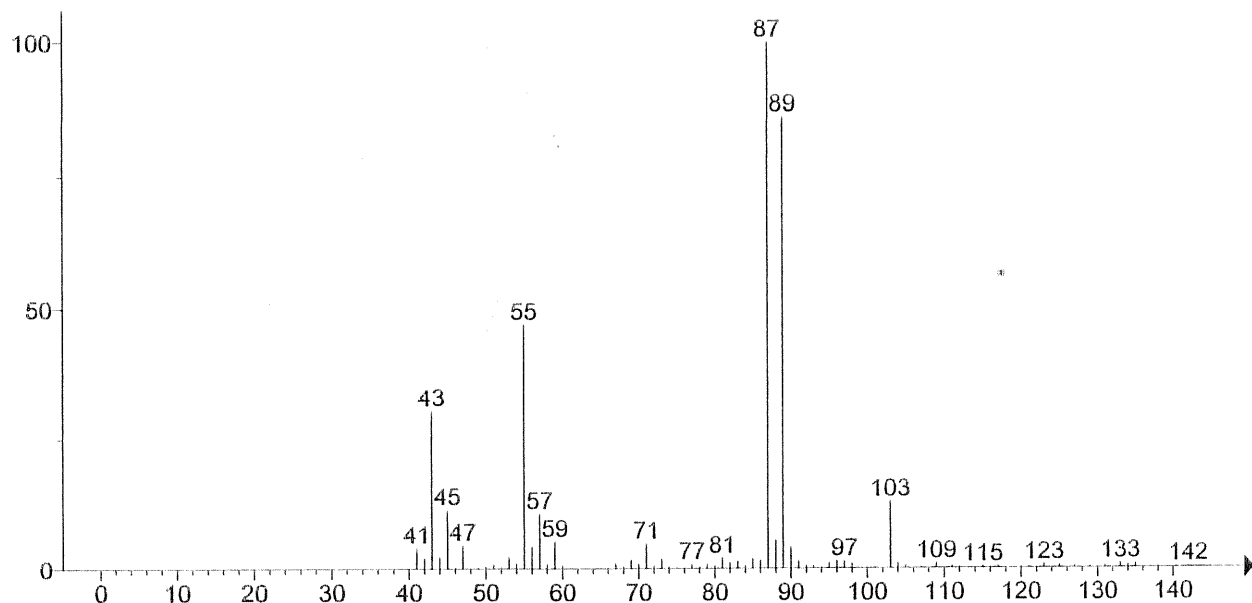
it

PM

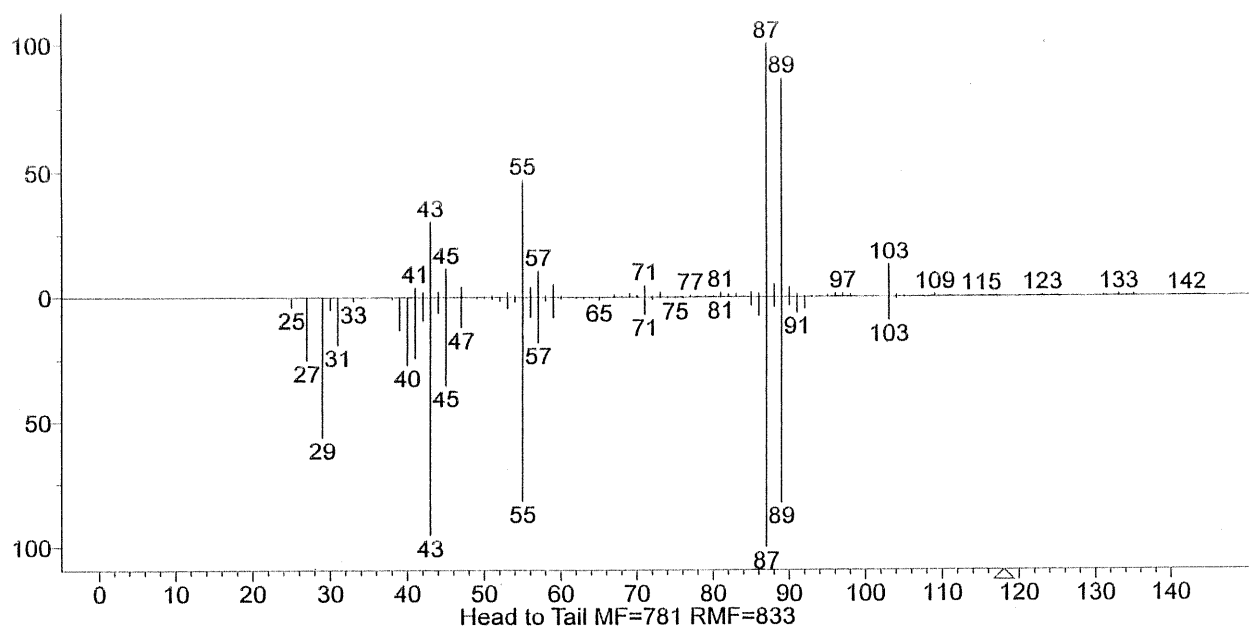
DRAG-H4

Peak Number	RT	Area	Area %	Height	Width	Area Sum %	Height %
1	5.166	344433	6.14	88468	0.114	2.79	12.92
2	6.688	120192	2.14	47537	0.093	0.97	6.94
3	7.358	61537	1.1	21254	0.107	0.5	3.1
4	7.818	349576	6.23	32601	0.342	2.84	4.76
5	8.573	64761	1.15	15362	0.185	0.53	2.24
6	9.51	277201	4.94	44447	0.289	2.25	6.49
7	10.141	353820	6.3	22793	0.431	2.87	3.33
8	17.874	298238	5.31	48641	0.289	2.42	7.1
9	18.131	130153	2.32	38467	0.114	1.06	5.62
10	20.583	348128	6.2	88488	0.153	2.82	12.92
11	23.797	5613910	100	684743	0.328	45.53	100
12	24.26	436526	7.78	85555	0.189	3.54	12.49
13	26.898	81016	1.44	17437	0.164	0.66	2.55
14	29.802	510977	9.1	149294	0.132	4.14	21.8
15	30.974	137729	2.45	51779	0.093	1.12	7.56
16	32.735	110781	1.97	50676	0.078	0.9	7.4
17	33.041	108475	1.93	41739	0.086	0.88	6.1
18	33.266	21541	0.38	13077	0.05	0.17	1.91
19	33.847	39519	0.7	17163	0.075	0.32	2.51
20	35.133	453364	8.08	147822	0.11	3.68	21.59
21	35.229	165399	2.95	66035	0.075	1.34	9.64
22	35.878	493381	8.79	171986	0.1	4	25.12
23	40.255	40843	0.73	11841	0.118	0.33	1.73
24	42.774	184413	3.28	22078	0.303	1.5	3.22
25	47.66	51683	0.92	9885	0.171	0.42	1.44
26	76.665	1532021	27.29	539263	0.135	12.43	78.75

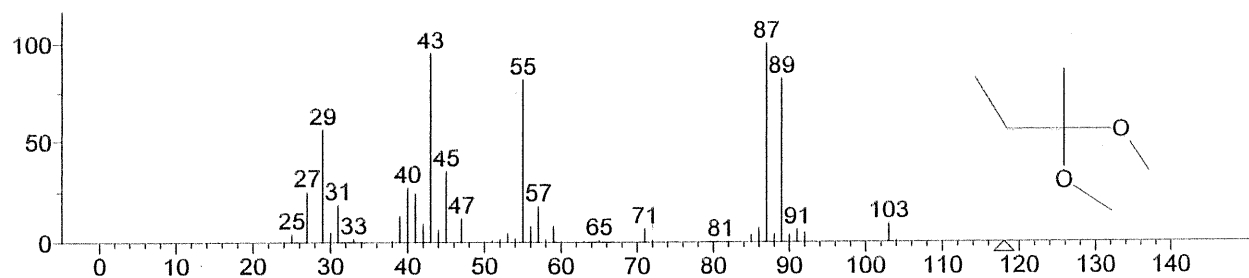
100.01



(Text File) +EI Scan (5.166 min) ALI-DRAG-H4-220421-.D Subtract



Head to Tail MF=781 RMF=833



(mainlib) 2,2-Dimethoxybutane

Name: 2,2-Dimethoxybutane

Formula: C₆H₁₄O₂

MW: 118 CAS#: 3453-99-4 NIST#: 250250 ID#: 48775 DB: mainlib

Other DBs: None

Contributor: TNO Volatile Compounds in Food - Chemical Concepts

10 largest peaks:

87 999 | 43 950 | 89 822 | 55 817 | 29 560 | 45 351 | 40 270 | 27 251 | 41 242 | 31 188 |

Synonyms:

no synonyms.

Estimated non-polar retention index (n-alkane scale):

Value: 685 iu

Confidence interval (Ethers): 68(50%) 293(95%) iu

Retention index.

1. Value: 748.5 iu

Column Type: Capillary

Column Class: Semi-standard non-polar

Active Phase: SE-54

Column

Length: 30 m

Carrier Gas: He

Column Diameter: 0.25 mm

Phase Thickness: 0.25 µm

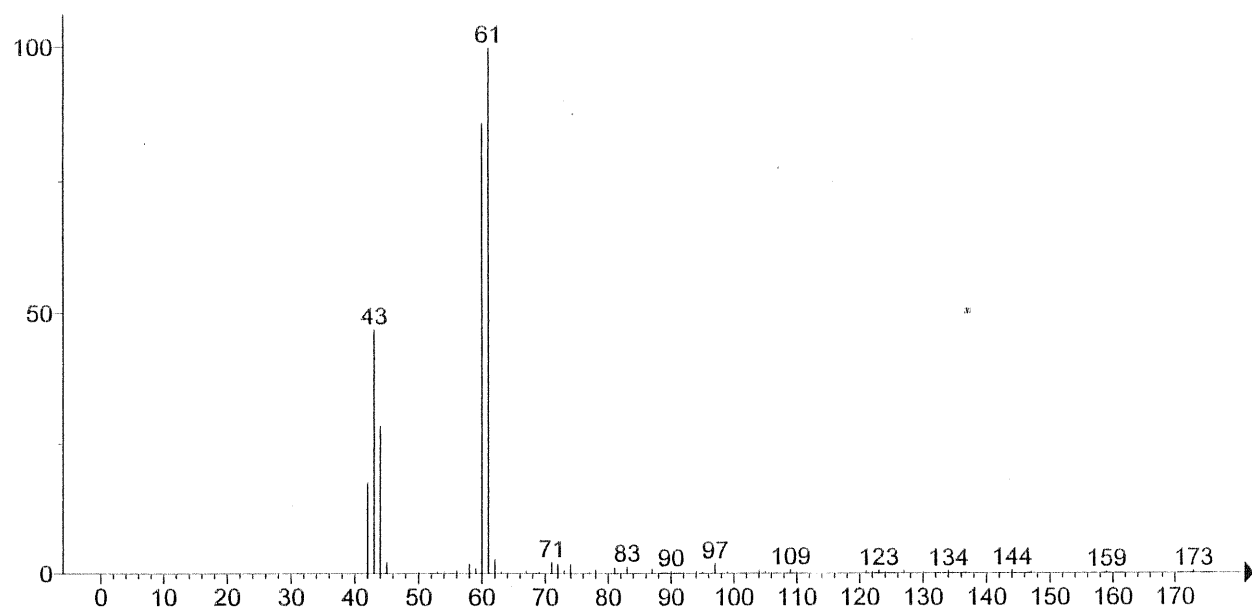
Data Type: Normal

alkane RI

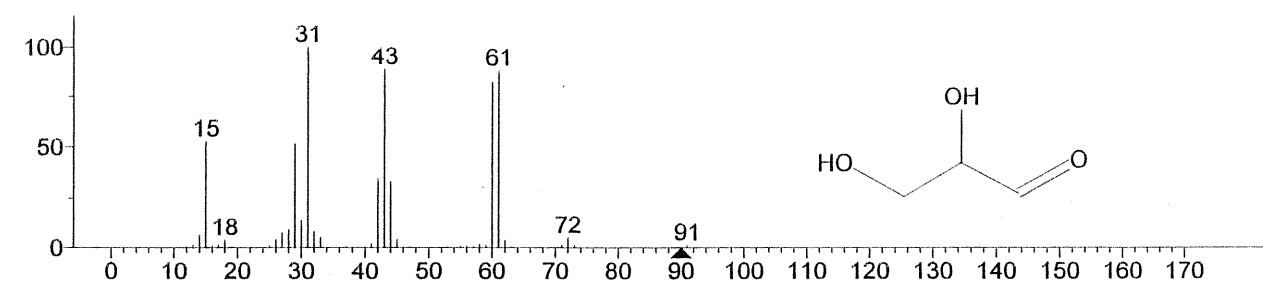
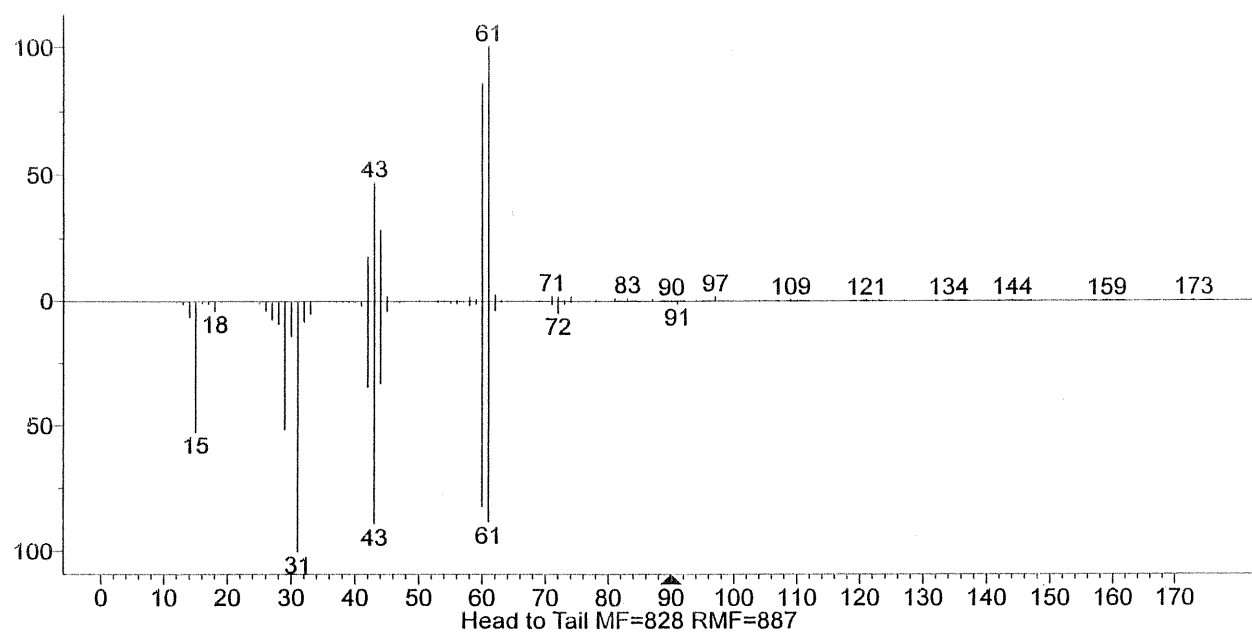
Program Type: Complex

Description: 40C(5min) => 4C/min => 230C(20min) => 5C/min => 280C (5min)

Source: Gao, H.; Zhao, T.; Kong, Q.; Chen, X.; Hu, Z., Analysis of unknown organic pollutants in sewage by solid-phase extraction combined with gas chromatography-mass spectrometry, J. Chromatogr. Sci., 42, 2004, 91-99.



(Text File) +EI Scan (7.354 min) ALI-DRAG-H4-220421-.D Subtract



(mainlib) dl-Glyceraldehyde

Name: dl-Glyceraldehyde

Formula: C₃H₆O₃

MW: 90 CAS#: 56-82-6 NIST#: 228082 ID#: 1361 DB: mainlib

Other DBs: Fine, TSCA, RTECS, HODOC, EINECS

Contributor: Japan AIST/NIMC Database- Spectrum MS-NW-6286

10 largest peaks:

31 999 | 43 888 | 61 880 | 60 821 | 15 525 | 29 515 | 42 346 | 44 331 | 30 139 | 28 92 |

Synonyms:

1. Propanal, 2,3-dihydroxy-, (±)-

2. Propanal, 2,3-dihydroxy-, (.+-.)-

3. Glyceraldehyde, dl-

4. Glyceraldehyde, (±)-

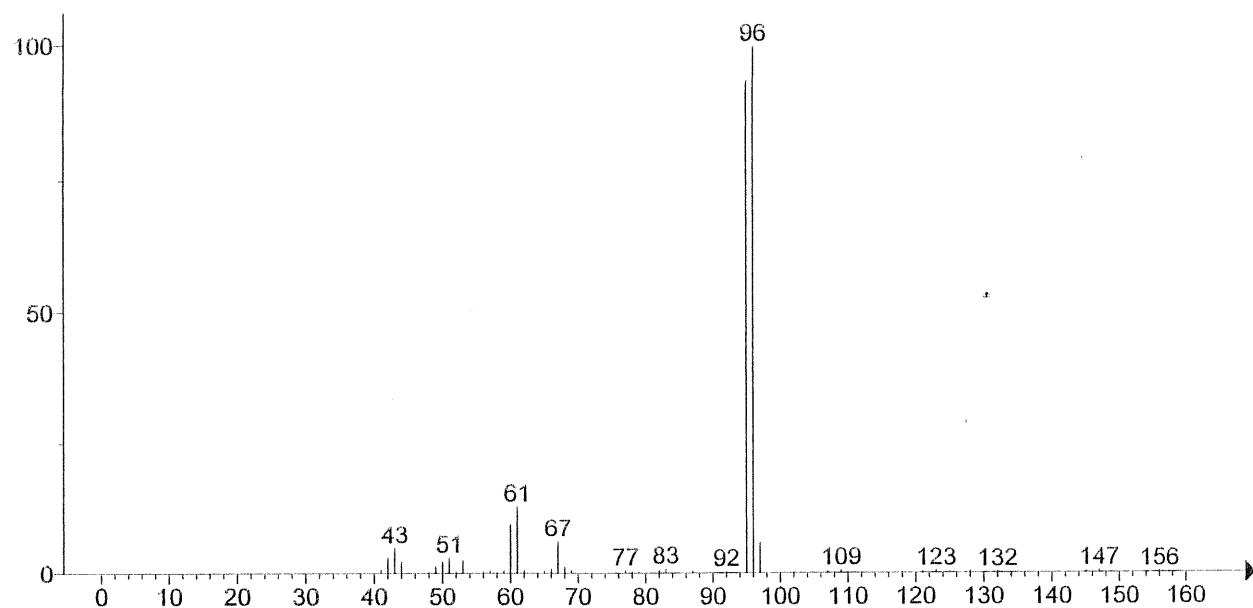
5. DL-Glyceric aldehyde

6. 2,3-Dihydroxypropanal #

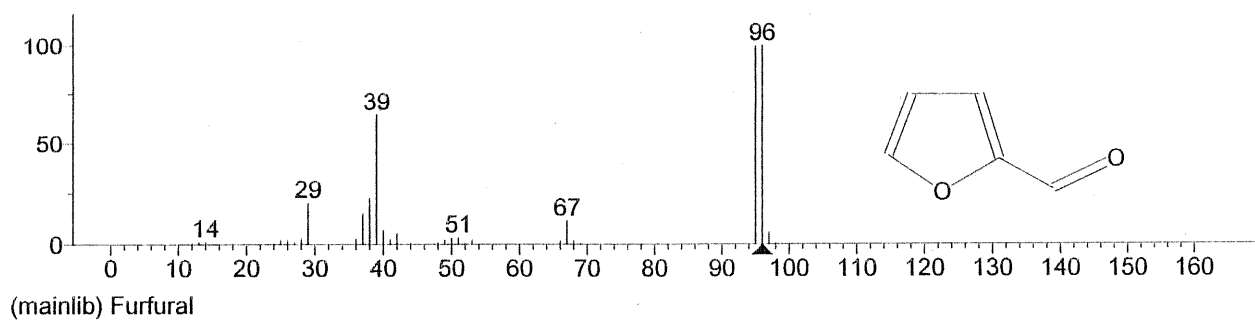
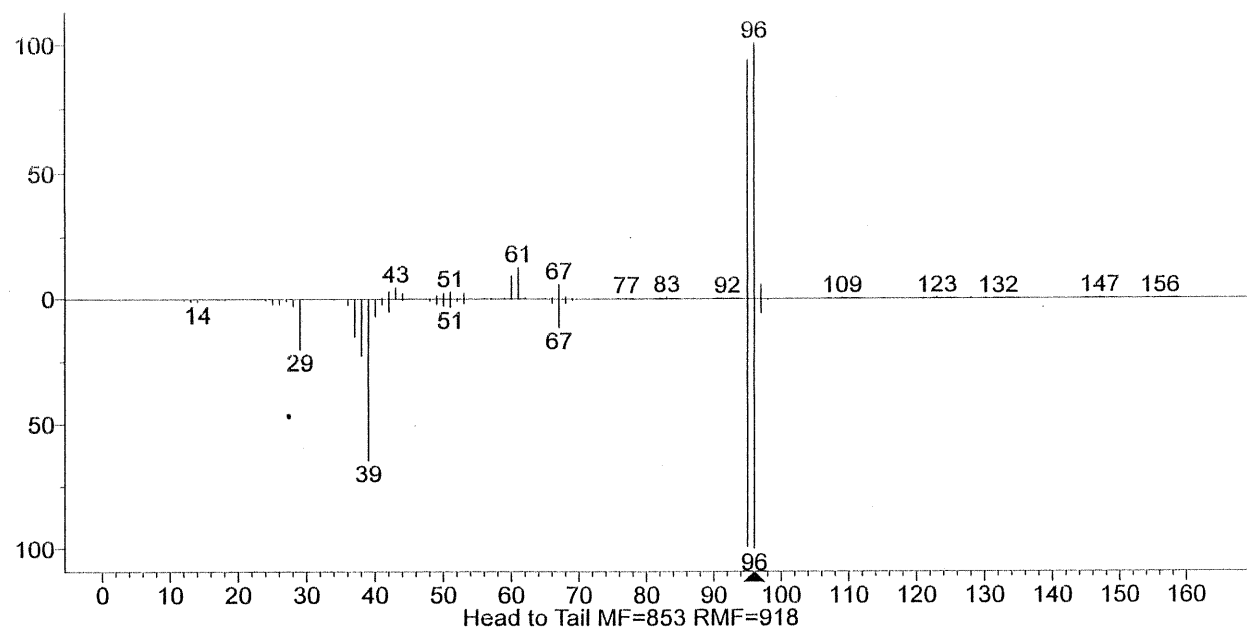
Estimated non-polar retention index (n-alkane scale):

Value: 913 iu

Confidence interval (Diverse functional groups): 89(50%) 382(95%) iu



(Text File) +EI Scan (7.818 min) ALI-DRAG-H4-220421-.D Subtract



(mainlib) Furfural

Name: Furfural

Formula: C₅H₄O₂

MW: 96 CAS#: 98-01-1 NIST#: 118785 ID#: 59378 DB: mainlib

Other DBs: Fine, TSCA, RTECS, EPA, HODOC, NIH, EINECS, IRDB

Contributor: NIST Mass Spectrometry Data Center, 1990.

10 largest peaks:

96 999 | 95 991 | 39 644 | 38 226 | 29 201 | 37 151 | 67 114 | 40 69 | 97 57 | 42 53 |

Synonyms:

1.2-Furancarboxaldehyde
2.2-Furaldehyde
3.α-Furole
4.Artificial ant oil
5.Fural
6.Furaldehyde
7.Furale
8.Furancarbonal
9.Furfuraldehyde
10.Furfurole
11.Furfurylaldehyde
12.Furole
13.Pyromucic aldehyde
14.2-Formylfuran
15.2-Furanaldehyde
16.2-Furancarbonal
17.2-Furfural
18.2-Furfuraldehyde
19.2-Furylaldehyde
20.Furol
21.2-Furylmethanal
22.Artificial oil of ants
23.Furfurale
24.Furfurol
25.Nci-C56177
26.2-Furil-metanale
27.2-Furankarbaldehyd
28.Furfuralu
29.Rcra waste number U125
30.UN 1199
31.2-Furylaldehyde xypropane
32.2-Furylcarboxaldehyde
33.Cyclic aldehyde
34.Qo furfural

Estimated non-polar retention index (n-alkane scale):

Value: 831 iu

Confidence interval (Diverse functional groups): 89(50%) 382(95%) iu

Retention index.

1. Value: 794 iu

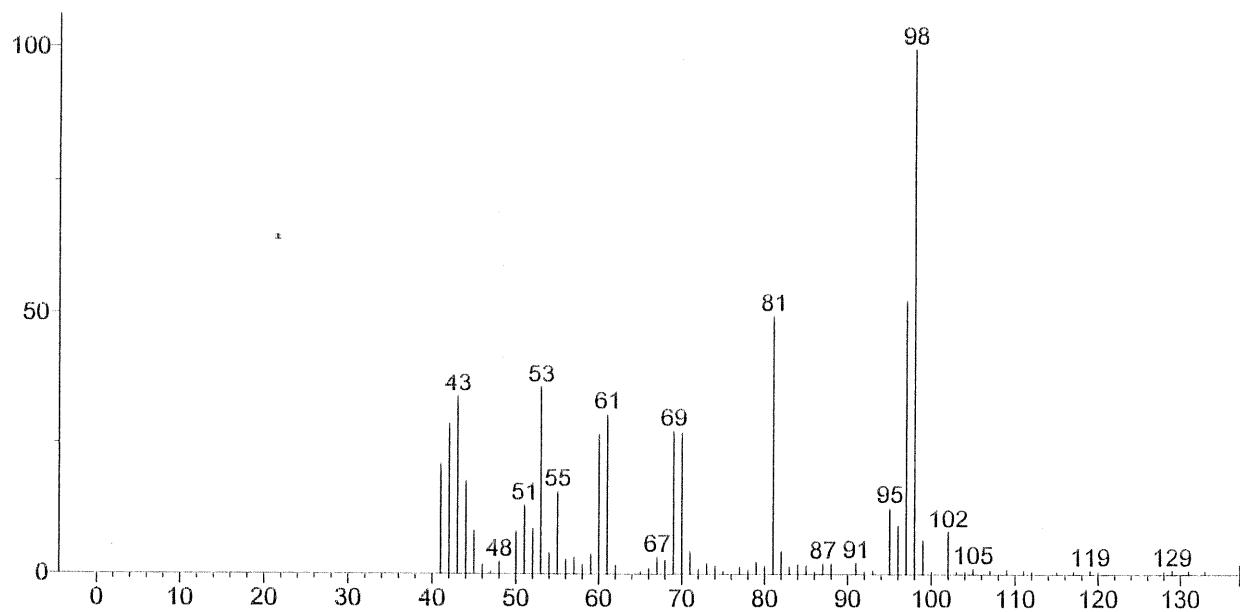
Column Type: Capillary

Column Class: Standard non-polar

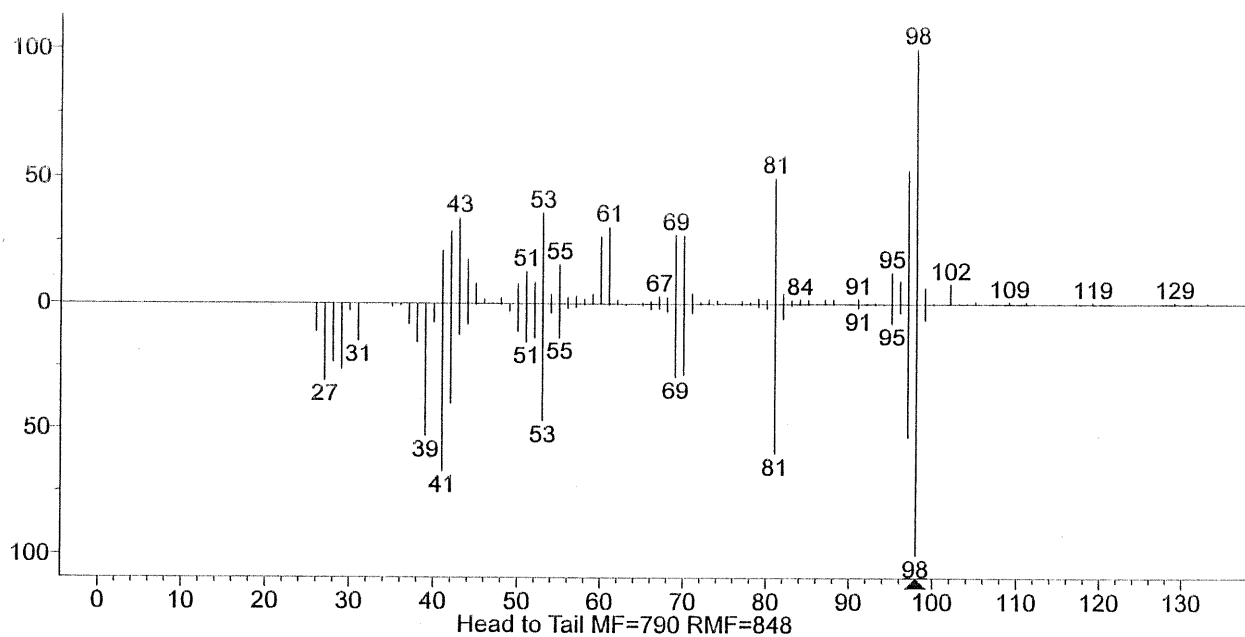
Active Phase: CP Sil 5 CB

Column

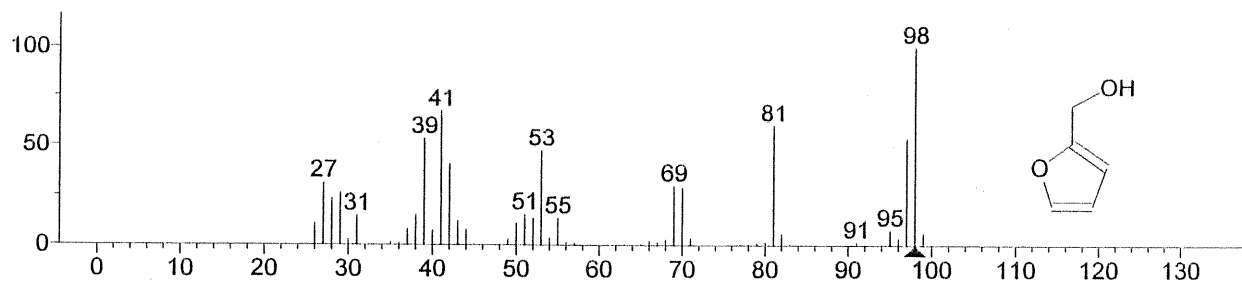
Length: 60 m



(Text File) +EI Scan (8.584 min) ALI-DRAG-H4-220421-.D



Head to Tail MF=790 RMF=848



(replib) 2-Furanmethanol

Name: 2-Furanmethanol

Formula: C₅H₆O₂

MW: 98 CAS#: 98-00-0 NIST#: 149344 ID#: 12838 DB: replib

Other DBs: Fine, TSCA, RTECS, EPA, HODOC, NIH, EINECS, IRDB

Contributor: Chemical Concepts

10 largest peaks:

98 999 | 41 668 | 81 597 | 97 532 | 39 529 | 53 469 | 42 403 | 27 307 | 69 294 | 70 284 |

Synonyms:

1. Furfuryl alcohol
2. α -Furfuryl alcohol
3. α -Furylcarbinol
4. Furfuralcohol
5. Furyl alcohol
6. Furylcarbinol
7. 2-(Hydroxymethyl)furan
8. 2-Furancarbinol
9. 2-Furanylmethanol
10. 2-Furfuryl alcohol
11. 2-Furylcarbinol
12. 2-Furylmethanol
13. 5-Hydroxymethylfuran
14. Furfural alcohol
15. Methanol, (2-furyl)-
16. NCI-C56224
17. 2-Furfurylalkohol
18. UN 2874
19. 5-Hydroxymethylfuranal
20. FA
21. Qo furfuryl alcohol

Estimated non-polar retention index (n-alkane scale):

Value: 885 iu

Confidence interval (Diverse functional groups): 89(50%) 382(95%) iu

Retention index.

1. Value: 819 iu

Column Type: Capillary

Column Class: Standard non-polar

Active Phase: CP Sil 5 CB

Column

Length: 60 m

Carrier Gas: He

Column Diameter: 0.32 mm

Phase Thickness: 0.25 μ m

Data Type: Linear

RI

Program Type: Ramp

Start T: 60 C

End T: 280 C

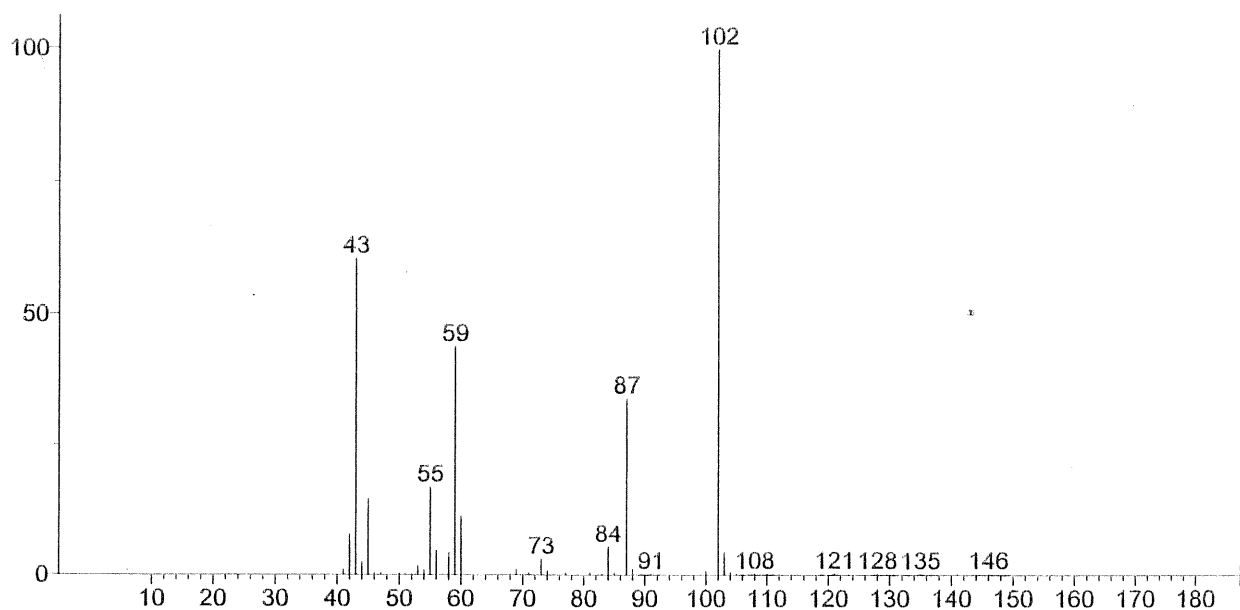
Heat Rate: 3 K/min

Start Time: 10 min

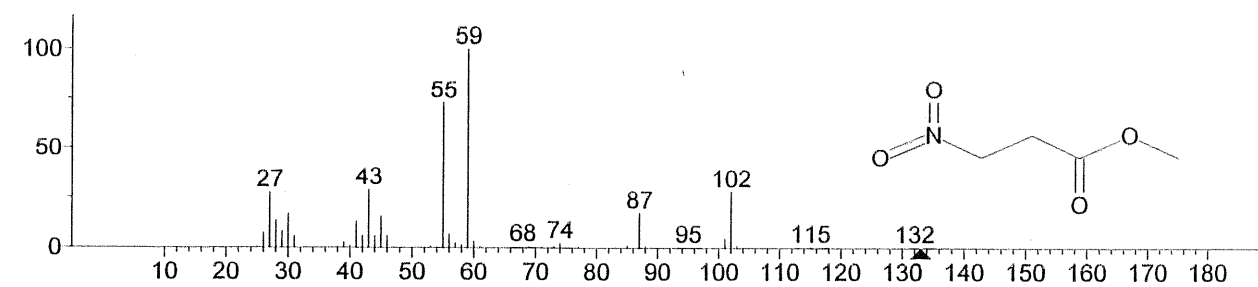
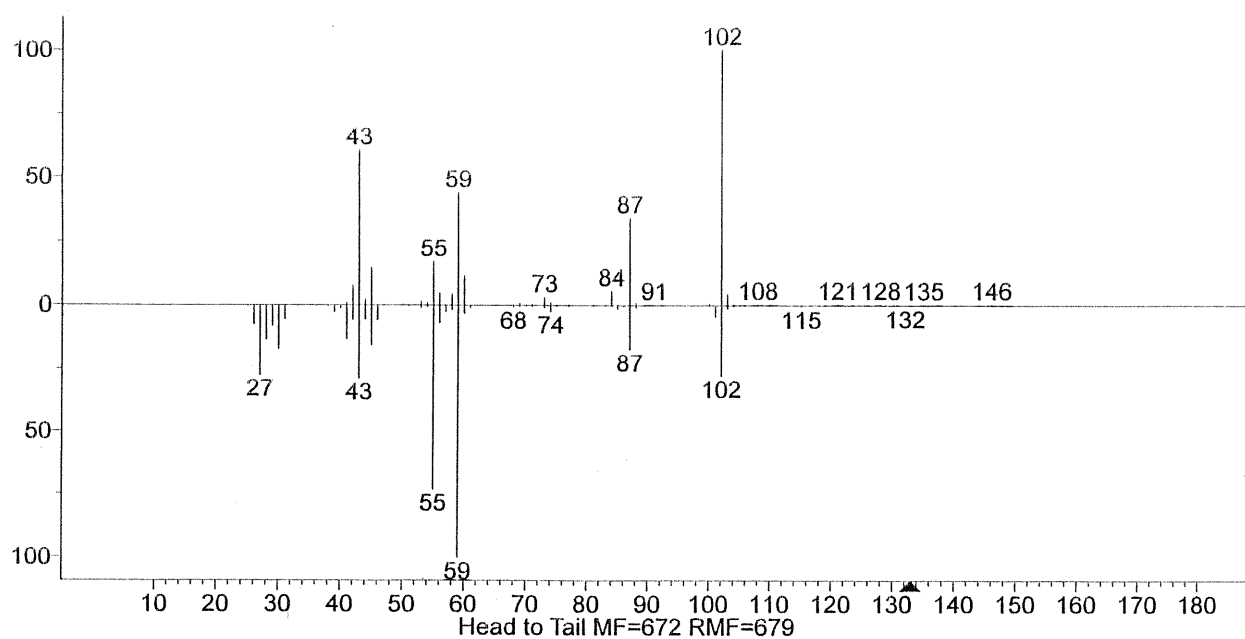
End Time: 60

min

Source: Pino, J.; Almora, K.; Marbot, R., Volatile components of papaya (*Carica papaya* L., maradol variety)



(Text File) +EI Scan (9.514 min) ALI-DRAG-H4-220421-.D Subtract



(mainlib) Propanoic acid, 3-nitro-, methyl ester

Name: Propanoic acid, 3-nitro-, methyl ester

Formula: $C_4H_7NO_4$

MW: 133 CAS#: 20497-95-4 NIST#: 188743 ID#: 26333 DB: mainlib

Other DBs: None

Contributor: Chemical Concepts

10 largest peaks:

59 999 | 55 729 | 43 287 | 102 277 | 27 274 | 87 172 | 30 171 | 45 154 | 28 134 | 41 132 |

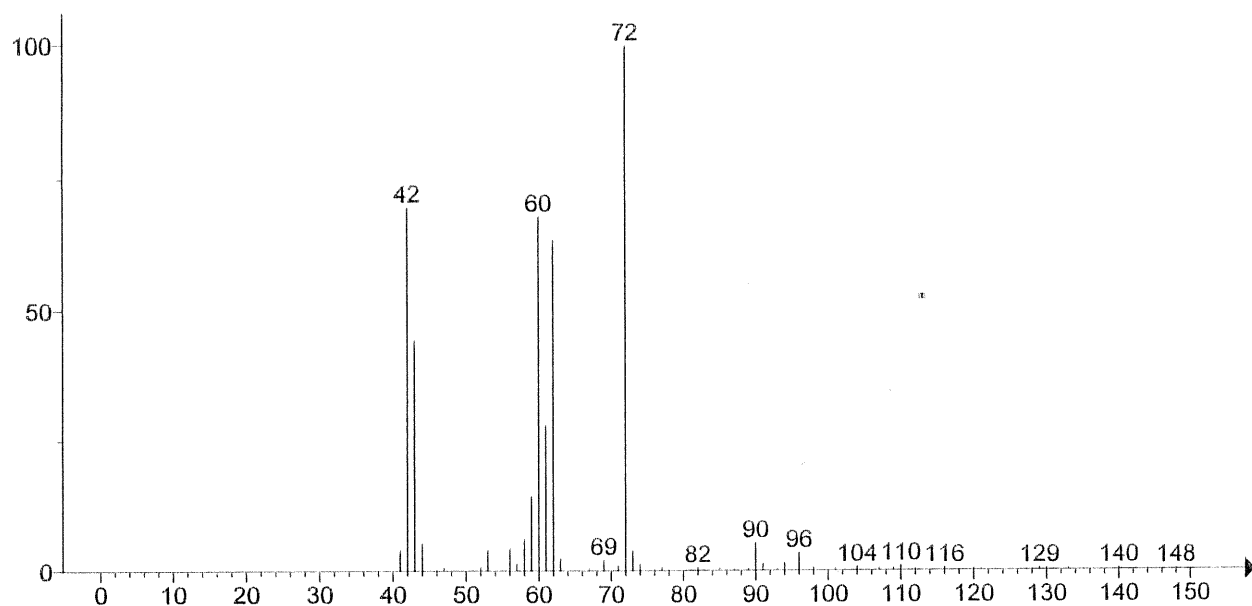
Synonyms:

1.Methyl 3-nitropropanoate #

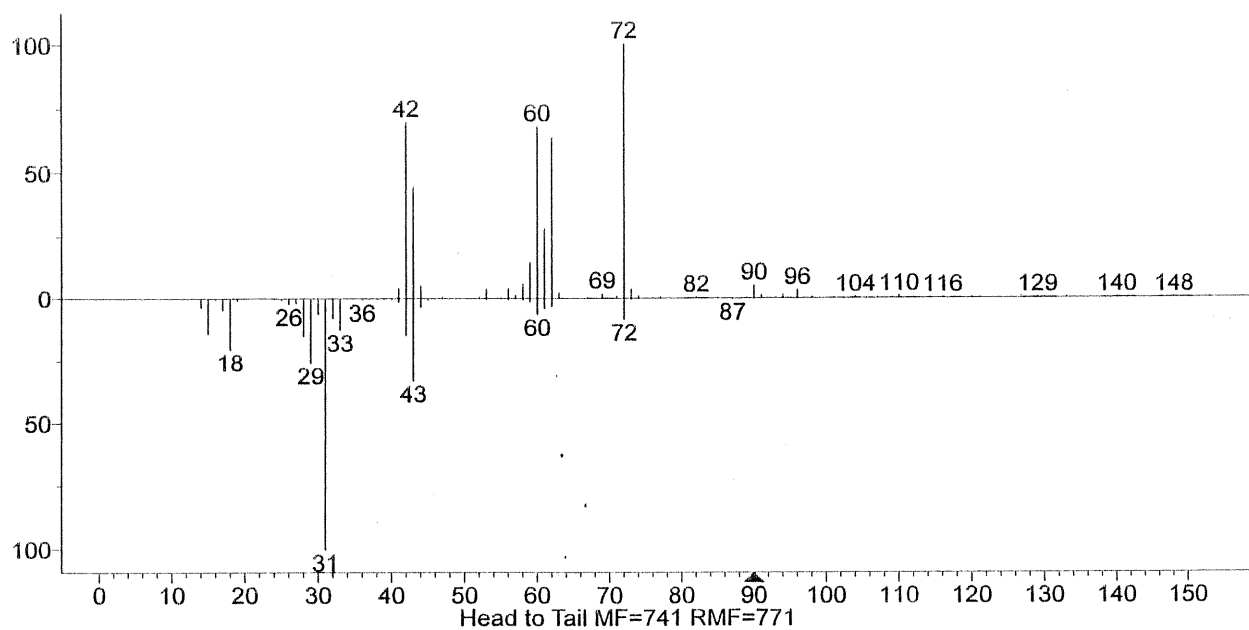
Estimated non-polar retention index (n-alkane scale):

Value: 968 iu

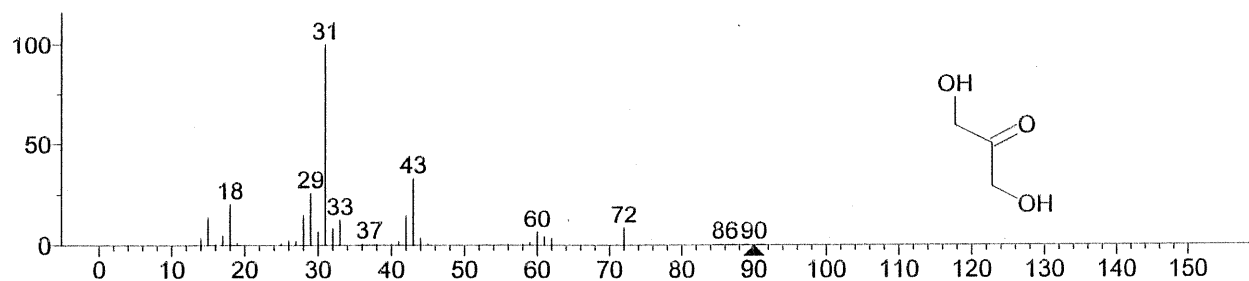
Confidence interval (Diverse functional groups): 89(50%) 382(95%) iu



(Text File) +EI Scan (10.106 min) ALI-DRAG-H4-220421-.D Subtract



Head to Tail MF=741 RMF=771



(mainlib) 2-Propanone, 1,3-dihydroxy-

Name: 2-Propanone, 1,3-dihydroxy-

Formula: C₃H₆O₃

MW: 90 CAS#: 96-26-4 NIST#: 743 ID#: 1356 DB: mainlib

Other DBs: Fine, TSCA, RTECS, HODOC, NIH, EINECS

10 largest peaks:

31 999 | 43 330 | 29 257 | 18 204 | 28 150 | 42 147 | 15 140 | 33 125 | 72 83 | 32 80 |

Synonyms:

1. Dihydroxyacetone
2. Chromelin
3. Dihyxl
4. Otan
5. Oxantin
6. Oxatone
7. Soleal
8. Triulose
9. Viticolor
10. 1,3-Dihydroxy-2-propanone
11. 1,3-Dihydroxyacetone
12. NSC-24343
13. 1,3-Dihydroxypropanone
14. 1,3-Dihydroxydimethyl ketone
15. Aliphatic ketone
16. Ketochromin
17. Protosol

Estimated non-polar retention index (n-alkane scale):

Value: 941 iu

Confidence interval (Diverse functional groups): 89(50%) 382(95%) iu

Retention index.

1. Value: 2068 iu

Column Type: Capillary

Column Class: Standard polar

Active Phase: BP-20

Column Length:

30 m

Carrier Gas: He

Column Diameter: 0.25 mm

Phase Thickness: 0.25 µm

Data Type: Normal alkane

RI

Program Type: Complex

Description: 50C(1min) =>2.5C/min =>100C =>2C/min =>180C =>15C/min
=>220C

Source: Pontes, M.; Marques, J.C.; Camara, J.S., Screening of volatile composition from Portuguese multifloral honeys using headspace solid-phase microextraction-gas chromatography-quadrupole mass spectrometry, Talanta, 74, 2007, 91-103.

2. Value: 2075 iu

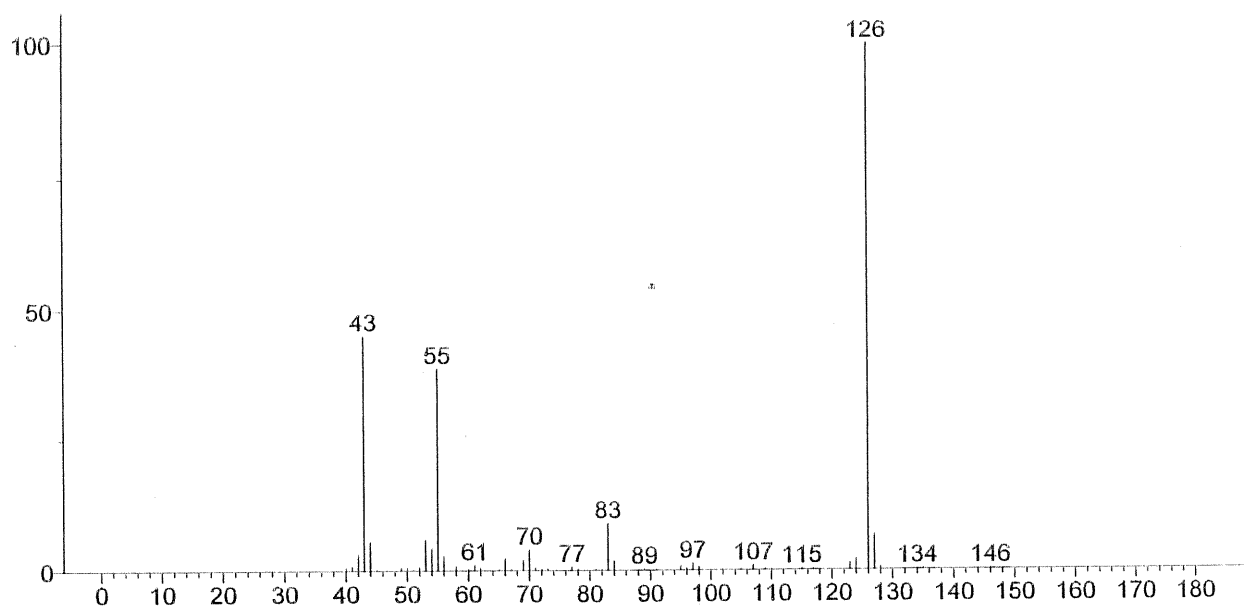
Column Type: Capillary

Column Class: Standard

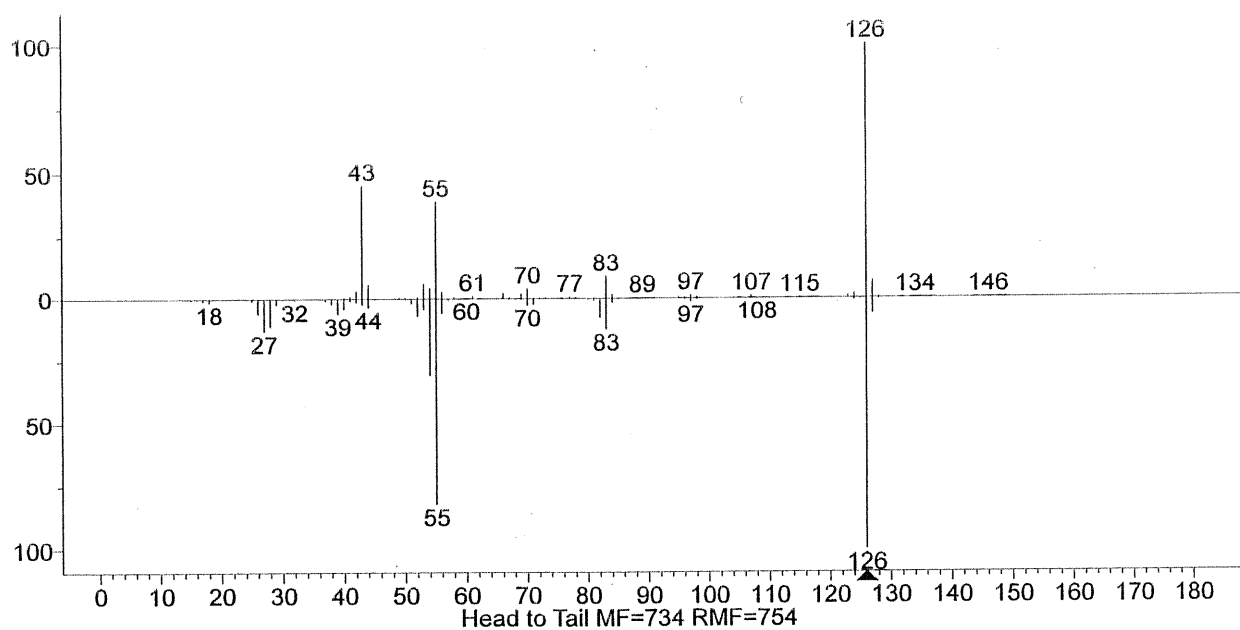
polar

Active Phase: BP-20

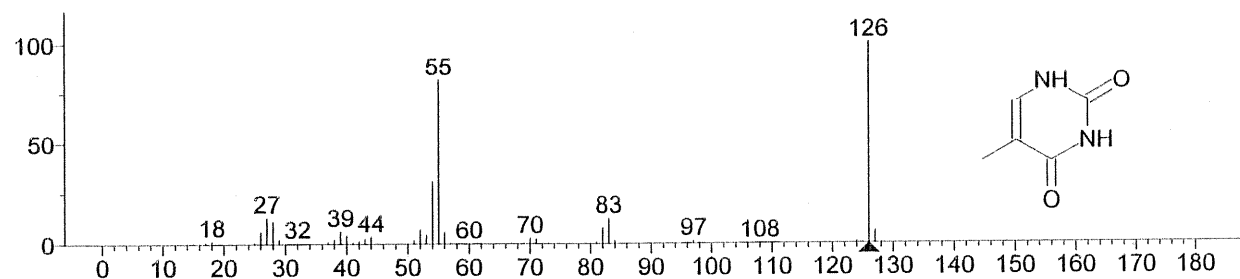
Column Length: 30 m



(Text File) +EI Scan (17.871 min) ALI-DRAG-H4-220421-.D Subtract



Head to Tail MF=734 RMF=754



(mainlib) Thymine

Name: Thymine

Formula: C₅H₆N₂O₂

MW: 126 CAS#: 65-71-4 NIST#: 228115 ID#: 89146 DB: mainlib

Other DBs: Fine, TSCA, RTECS, HODOC, NIH, EINECS

Contributor: Japan AIST/NIMC Database- Spectrum MS-NW- 639

10 largest peaks:

126 999 | 55 818 | 54 306 | 27 131 | 83 124 | 28 112 | 82 78 | 52 72 | 127 63 | 26 62 |

Synonyms:

1.2,4(1H,3H)-Pyrimidinedione, 5-methyl-

2. Thymin

3.2,4-Dihydroxy-5-methylpyrimidine

4.5-Methyluracil

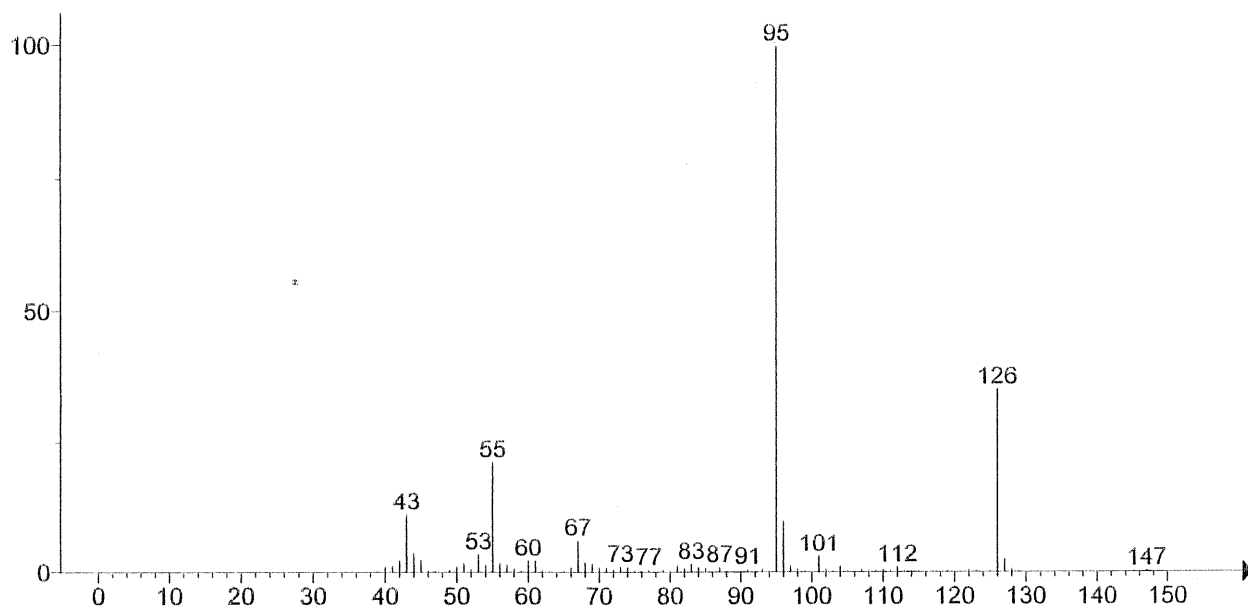
5.5-Methyl-2,4-dioxypyrimidine

6.5-Methyl-2,4(1H,3H)-pyrimidinedione

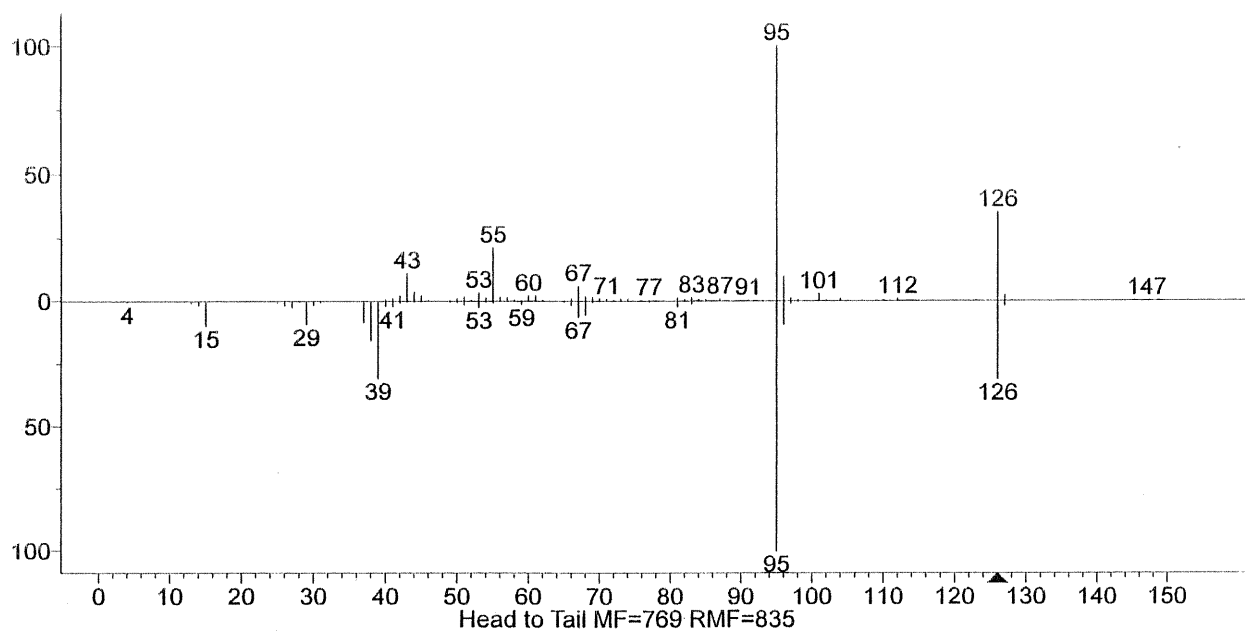
Estimated non-polar retention index (n-alkane scale):

Value: 1118 iu

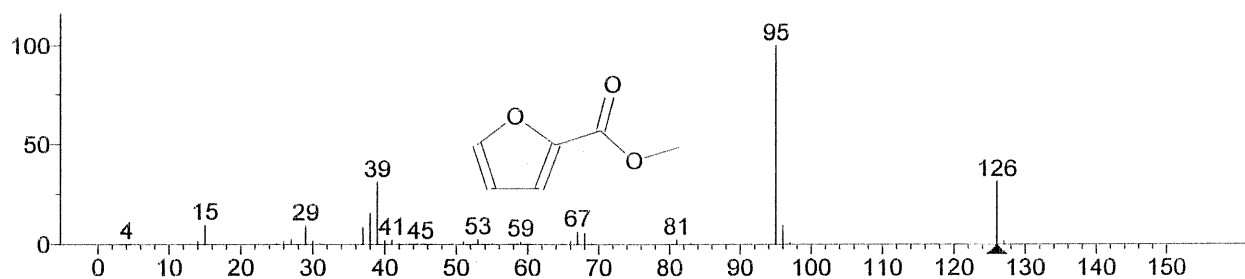
Confidence interval (Nitrogen-containing): 83(50%) 356(95%) iu



(Text File) +EI Scan (18.135 min) ALI-DRAG-H4-220421-.D



Head to Tail MF=769 RMF=835



(mainlib) Methyl 2-furoate

Name: Methyl 2-furoate

Formula: C₆H₆O₃

MW: 126 CAS#: 611-13-2 NIST#: 134082 ID#: 58739 DB: mainlib

Other DBs: TSCA, RTECS, HODOC, NIH, EINECS, IRDB

Contributor: NIST Mass Spectrometry Data Center, 1994

10 largest peaks:

95 999 | 126 311 | 39 307 | 38 156 | 15 98 | 96 94 | 29 92 | 37 85 | 67 63 | 68 55 |

Synonyms:

1.2-Furancarboxylic acid, methyl ester

2.2-Furoic acid, methyl ester

3.Methyl pyromucate

4.Methyl 2-furancarboxylate

5.Pyromucic acid methyl ester

6.Methyl α -furoate

7.Methyl furoate

8.Furan- α -carboxylic acid methyl ester

9.2-Furancarboxylic acid, methyl ester

Estimated non-polar retention index (n-alkane scale):

Value: 909 iu

Confidence interval (Diverse functional groups): 89(50%) 382(95%) iu

Retention index.

1. Value: 956 iu

Column Type: Capillary

Column Class: Standard non-polar

Active Phase: SE-30

Data Type:

Normal alkane RI

Program Type: Ramp

Source: Vinogradov, B.A., Production, composition, properties and application of essential oils, 2004.

2. Value: 956 iu

Column Type: Capillary

Column Class: Standard non

-polar

Active Phase: OV-101

Column Length: 50 m

Column Diameter: 0.22 mm

Data Type: Normal alkane

RI

Program Type: Ramp

Start T: 80 C

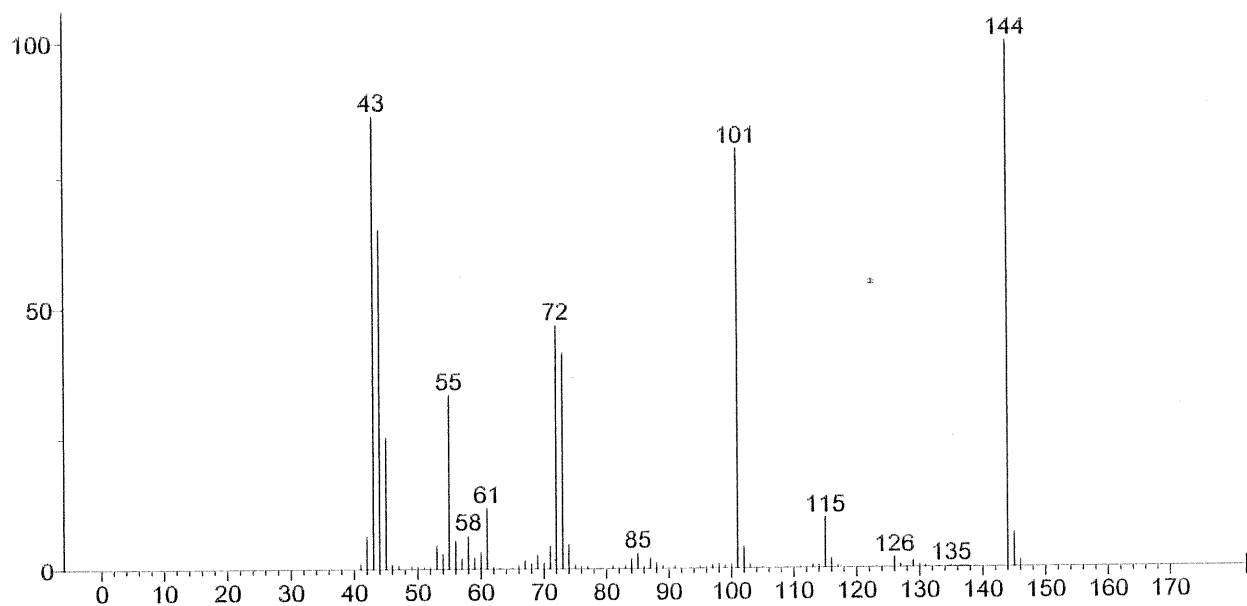
End T: 200 C

Heat Rate: 2 K/min

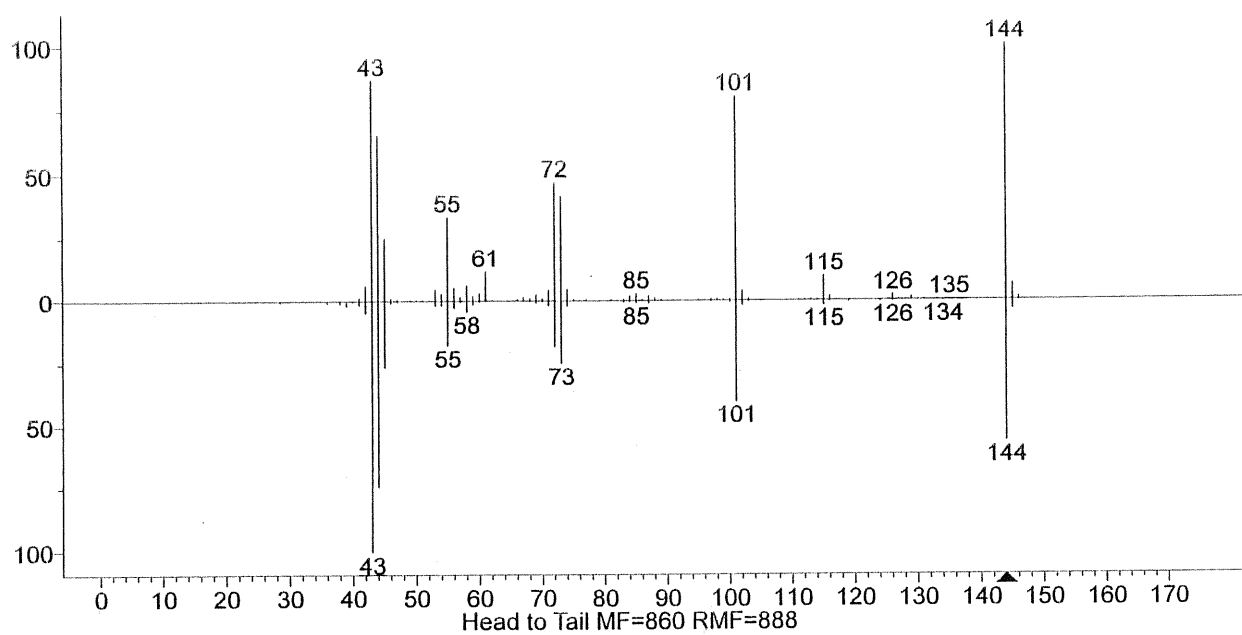
Source: Egolf, L.M.; Jurs, P.C.,

Quantitative structure-retention and structure-odor intensity relationships for a diverse group of odor-active compounds, Anal. Chem., 65, 1993, 3119-3126.

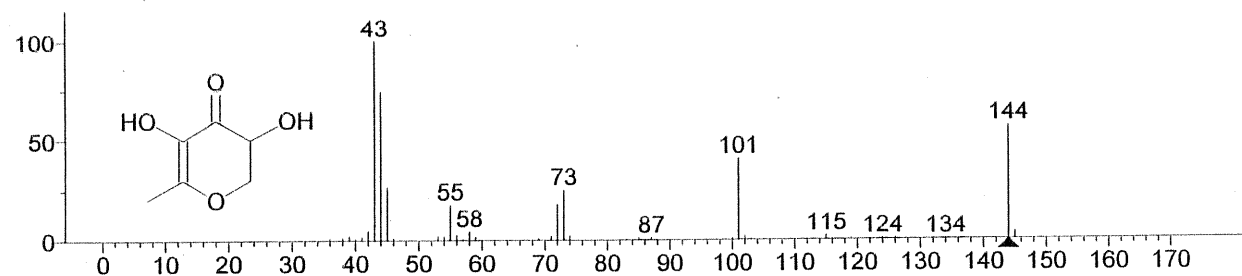
<...>



(Text File) +EI Scan (20.579 min) ALI-DRAG-H4-220421-.D



Head to Tail MF=860 RMF=888



(replib) 4H-Pyran-4-one, 2,3-dihydro-3,5-dihydroxy-6-methyl-

Name: 4H-Pyran-4-one, 2,3-dihydro-3,5-dihydroxy-6-methyl-

Formula: C₆H₈O₄

MW: 144 CAS#: 28564-83-2 NIST#: 108691 ID#: 1857 DB: replib

Other DBs: RTECS

Contributor: Philip Morris R&D

10 largest peaks:

43 999 | 44 742 | 144 563 | 101 402 | 45 264 | 73 249 | 72 182 | 55 177 | 42 48 | 58 43 |

Synonyms:

1,3,5-Dihydroxy-6-methyl-2,3-dihydro-4H-pyran-4-one #

Estimated non-polar retention index (n-alkane scale):

Value: 1269 iu

Confidence interval (Diverse functional groups): 89(50%) 382(95%) iu

Retention index.

1. Value: 1119 iu

Column Type: Capillary

Column Class: Standard non-polar

Active Phase: DB-1

Column

Length: 60 m

Carrier Gas: He

Column Diameter: 0.25 mm

Phase Thickness: 0.25 um

Data Type: Linear

RI

Program Type: Complex

Description: -20C (5min) => 10C/min => 100C => 4C/min => 200C => 10C/min => 280C

Source: Eri, S.; Khoo, B.K.; Lech, J.; Hartman, T.G., Direct thermal desorption-gas chromatography and gas chromatography-mass spectrometry profiling of hop (*Humulus lupulus* L.) essential oils in support of varietal characterization, *J. Agric. Food Chem.*, 48, 2000, 1140-1149.

2. Value: 1107 iu

Column Type: Capillary

Column

Class: Standard non-polar

Active Phase: DB-1

Column Length: 60 m

Carrier Gas: N2

Column Diameter: 0.25 mm

Phase Thickness: 1 um

Data Type: Linear RI

Program Type: Ramp

Start T: 30 C

End T: 200 C

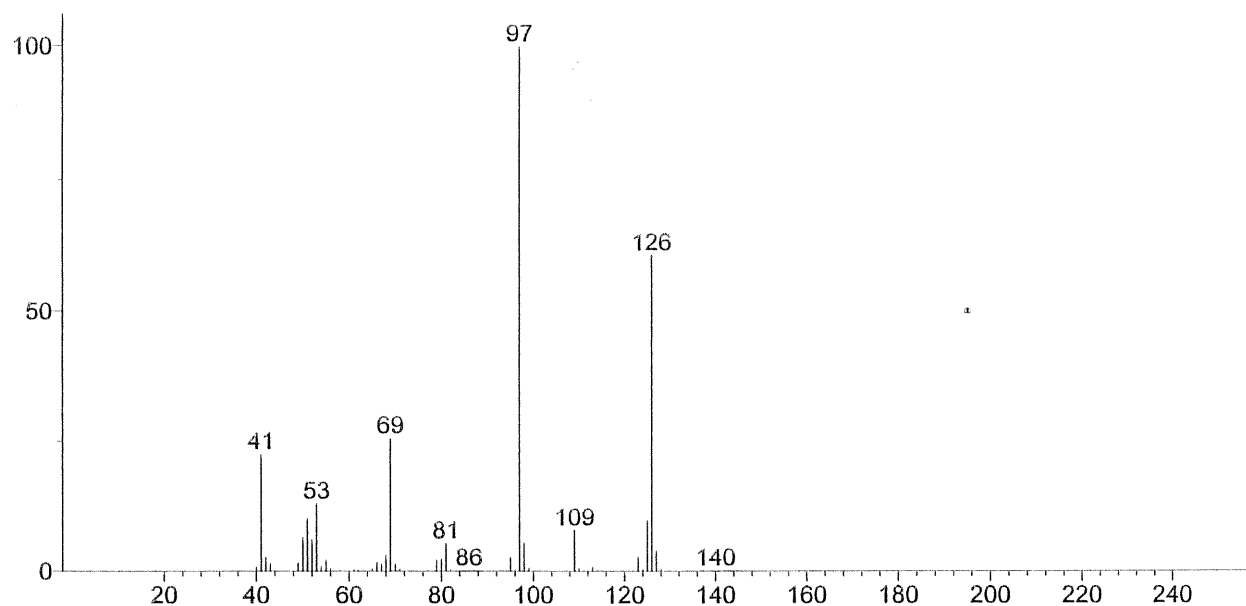
Heat

Rate: 5 K/min

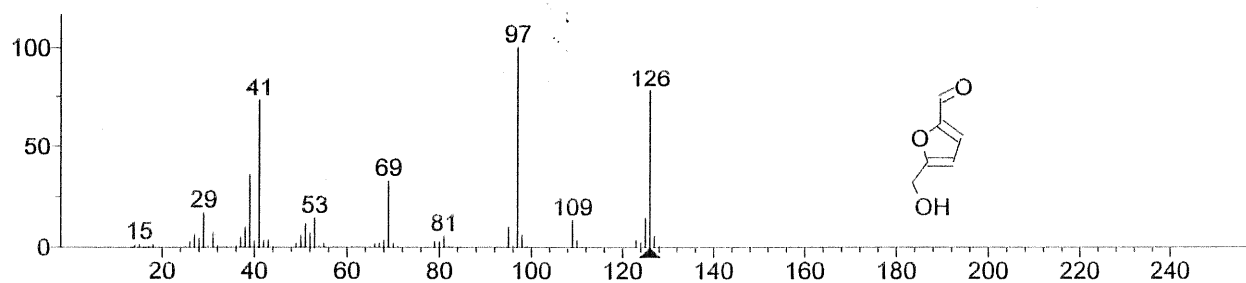
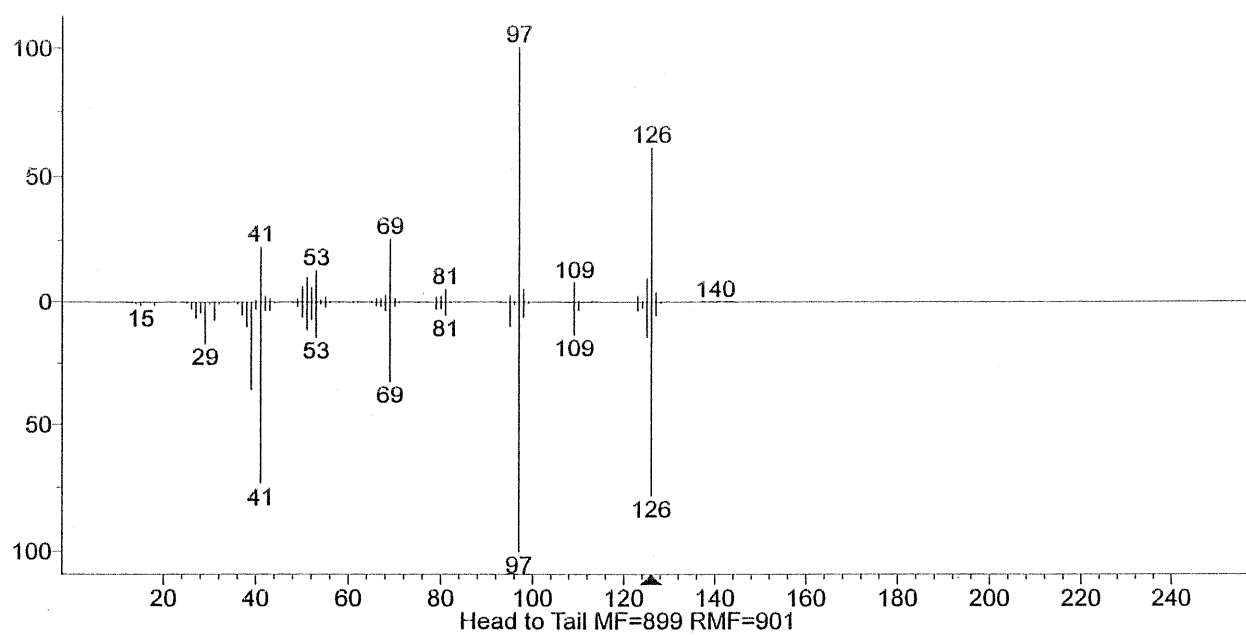
End Time: 30 min

Source: Wu, C.-M.; Wang, Z.; Wu, Q.H., Volatile compounds produced from monosodium glutamate in common food cooking, *J. Agric. Food Chem.*, 48, 2000, 2438-2442.

<...>



(Text File) +EI Scan (23.786 min) ALI-DRAG-H4-220421-D Subtract



(mainlib) 2-Furancarboxaldehyde, 5-(hydroxymethyl)-

Name: 2-Furancarboxaldehyde, 5-(hydroxymethyl)-

Formula: C₆H₆O₃

MW: 126 CAS#: 67-47-0 NIST#: 231276 ID#: 60271 DB: mainlib

Other DBs: Fine, TSCA, RTECS, HODOC, NIH, EINECS

Contributor: Japan AIST/NIMC Database- Spectrum MS-NW-4745

10 largest peaks:

97 999 | 126 779 | 41 732 | 39 358 | 69 326 | 29 171 | 53 145 | 125 145 | 109 134 | 51 115 |

Synonyms:

1.2-Furaldehyde, 5-(hydroxymethyl)-

2.5-Hydroxymethylfurfural

3.Hydroxymethylfurfurole

4.HMF

5.5-(Hydroxymethyl)Furfurole

6.5-(Hydroxymethyl)-2-formylfuran

7.5-(Hydroxymethyl)-2-furaldehyde

8.5-(Hydroxymethyl)-2-furancarboxal

9.5-(Hydroxymethyl)-2-furfural

10.5-(Hydroxymethyl)-2-furfuraldehyde

11.5-(Hydroxymethyl)furan-2-aldehyde

12.5-(Hydroxymethyl)furfural

13.5-Hydroxymethylfuraldehyde

14.5-Oxymethylfurfurole

15.5-Hydroxymethylfurfuraldehyde

16.5-Hydroxymethyl-2-furancarboxaldehyde

17.Hydroxymethylfurfuraldehyde

18.5-(Hydroxymethyl)-2-furancarboxaldehyde

19.2-Hydroxymethyl-5-furfural

Estimated non-polar retention index (n-alkane scale):

Value: 1163 iu

Confidence interval (Diverse functional groups): 89(50%) 382(95%) iu

Retention index.

1. Value: 1176 iu

Column Type: Capillary

Column Class: Standard non-polar

Active Phase: DB-1

Column

Length: 60 m

Carrier Gas: N₂

Column Diameter: 0.25 mm

Phase Thickness: 1 µm

Data Type: Linear

RI

Program Type: Ramp

Start T: 30 C

End T: 200 C

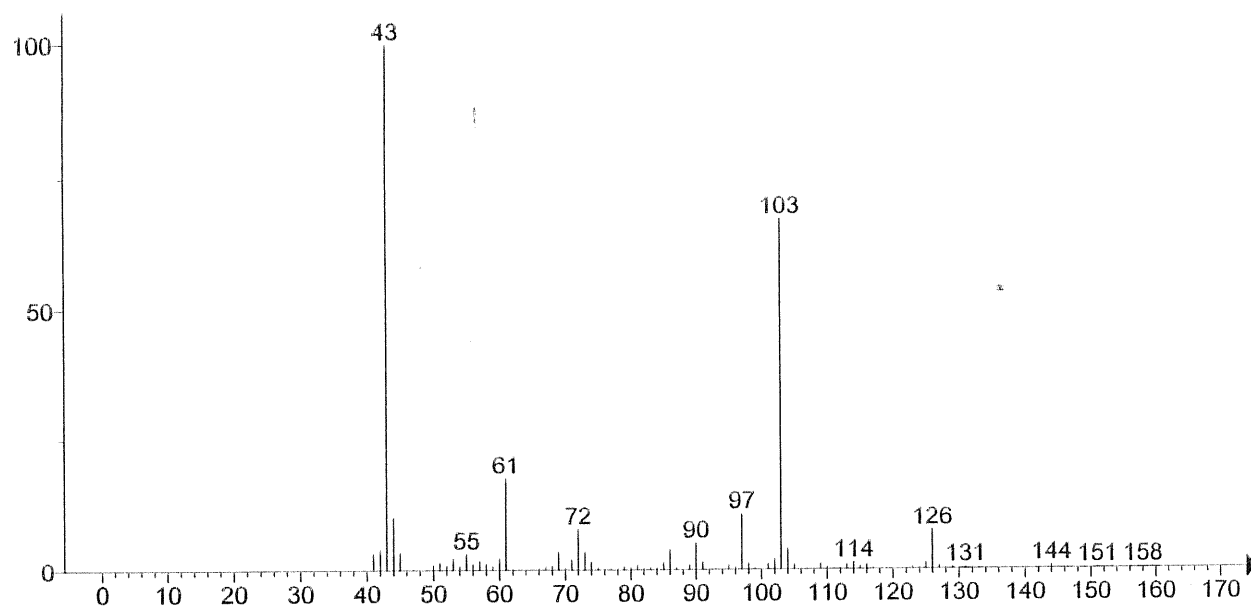
Heat Rate: 5 K/min

End Time: 30 min

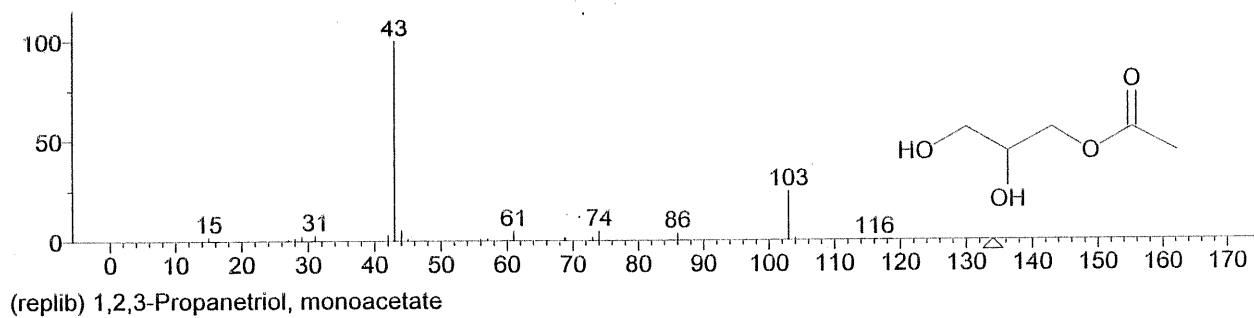
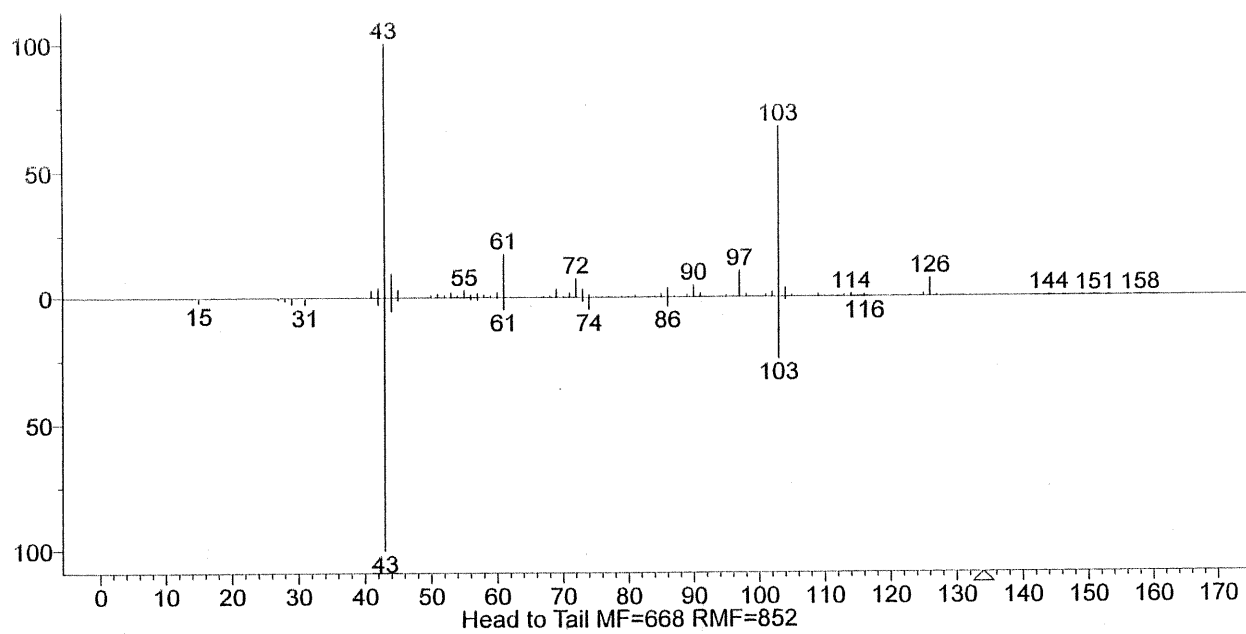
Source: Wu, C.-M.;

Wang, Z.; Wu, Q.H., Volatile compounds produced from monosodium glutamate in common food cooking, J. Agric. Food Chem., 48, 2000, 2438-2442.

2. Value: 1208 iu



(Text File) +EI Scan (24.264 min) ALI-DRAG-H4-220421-.D



(replib) 1,2,3-Propanetriol, monoacetate

Name: 1,2,3-Propanetriol, monoacetate

Formula: C₅H₁₀O₄

MW: 134 CAS#: 26446-35-5 NIST#: 76112 ID#: 2817 DB: replib

Other DBs: Fine, TSCA, RTECS, EINECS

Contributor: RADIAN CORP

10 largest peaks:

43 999 | 103 243 | 44 55 | 61 48 | 74 48 | 86 37 | 42 29 | 31 28 | 29 26 | 15 20 |

Synonyms:

1. Acetin, mono-
2. Acetin
3. Acetoglyceride
4. Acetyl monoglyceride
5. Glycerin monoacetate
6. Glycerol acetate
7. Glycerol monoacetate
8. Glyceryl acetate
9. Glyceryl monoacetate
10. Monoacetin
11. Myvacet
12. Glycerol 1-acetate
13. 1-Monoacetin
14. Acetic acid, monoglyceraldehyde
15. Alpha-monoacetin
16. Glycerol α -monoacetate
17. Hallco C-918
18. Monacetin
19. 2,3-Dihydroxypropyl acetate #

Estimated non-polar retention index (n-alkane scale):

Value: 1091 iu

Confidence interval (Diverse functional groups): 89(50%) 382(95%) iu

Retention index.

1. Value: 2250 iu

Column Type: Capillary

Column Class: Standard polar

Active Phase: DB-FFAP

Column

Length: 30 m

Carrier Gas: H₂

Column Diameter: 0.32 mm

Phase Thickness: 0.25 μ m

Data Type: Linear

RI

Program Type: Ramp

Start T: 40 C

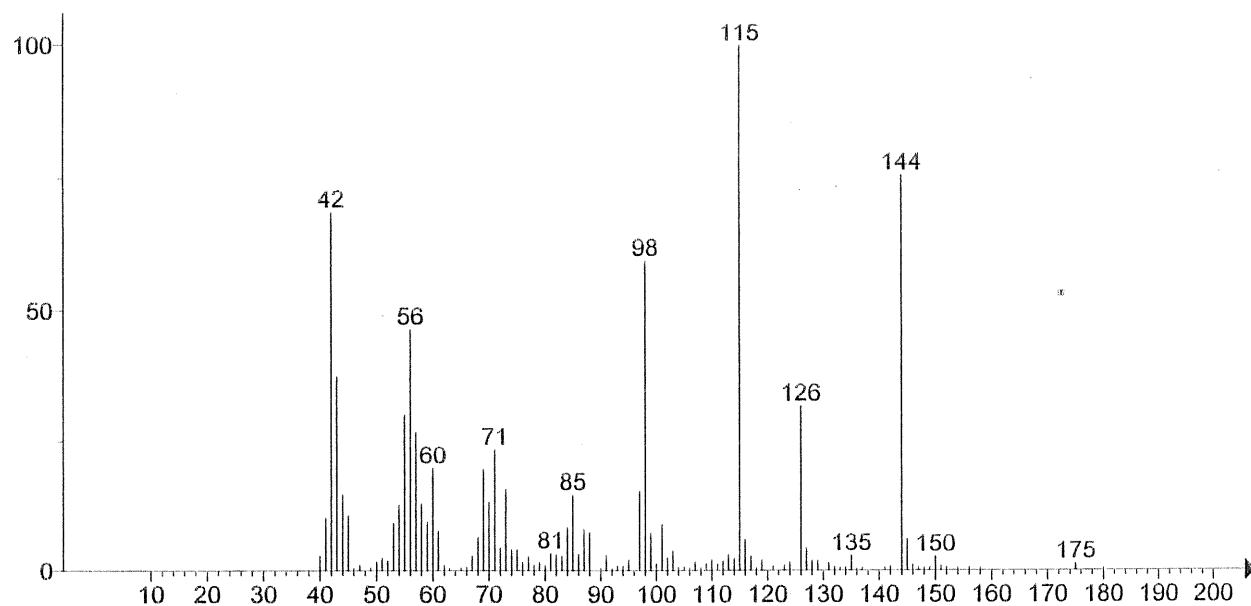
End T: 240 C

Heat Rate: 5 K/min

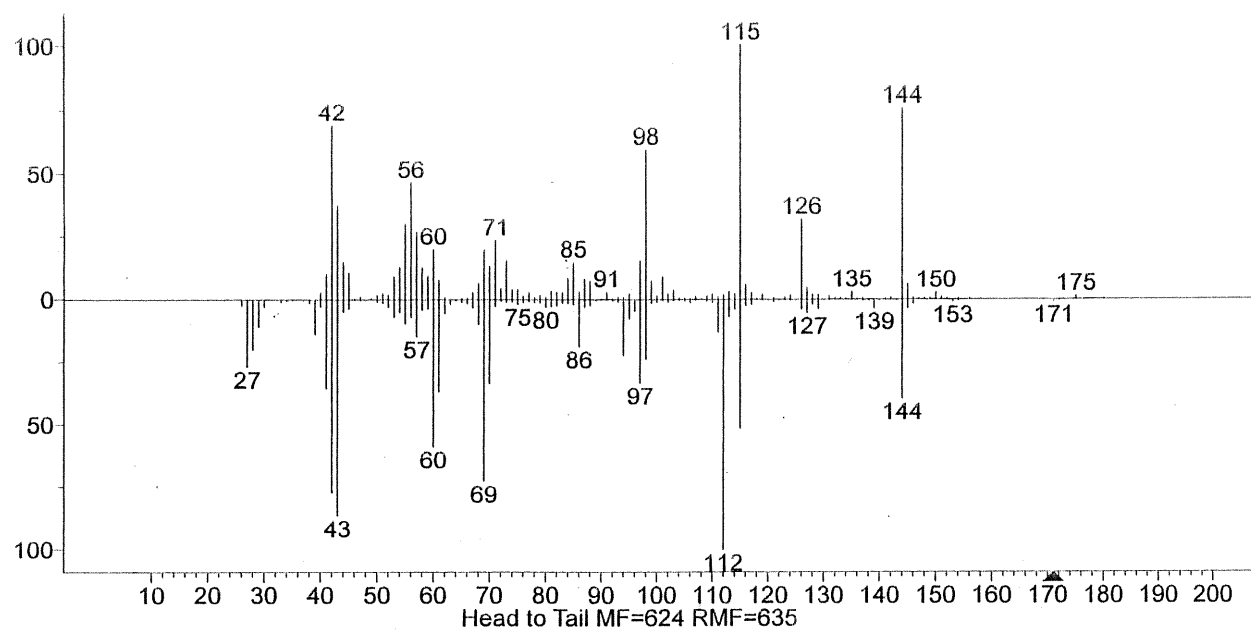
Start Time: 2 min

Source: Charles, M.

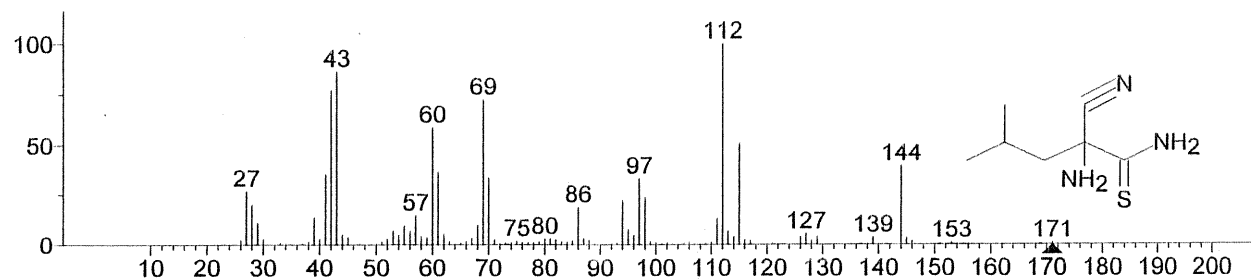
; Martin, B.; Ginies, C.; Etievant, P.; Coste, G.; Guichard, E., Potent aroma compounds of two red wine vinegars, J. Agric. Food Chem., 48, 2000, 70-77.



(Text File) +EI Scan (26.905 min) ALI-DRAG-H4-220421-.D



Head to Tail MF=624 RMF=635



(mainlib) 2-Amino-2-cyano-4-methylpentanethioamide

Name: 2-Amino-2-cyano-4-methylpentanethioamide

Formula: $C_7H_{13}N_3S$

MW: 171 NIST#: 185735 ID#: 75633 DB: mainlib

Contributor: Chemical Concepts

10 largest peaks:

112 999 | 43 862 | 42 770 | 69 724 | 60 586 | 115 512 | 144 394 | 61 367 | 41 353 | 70 334 |

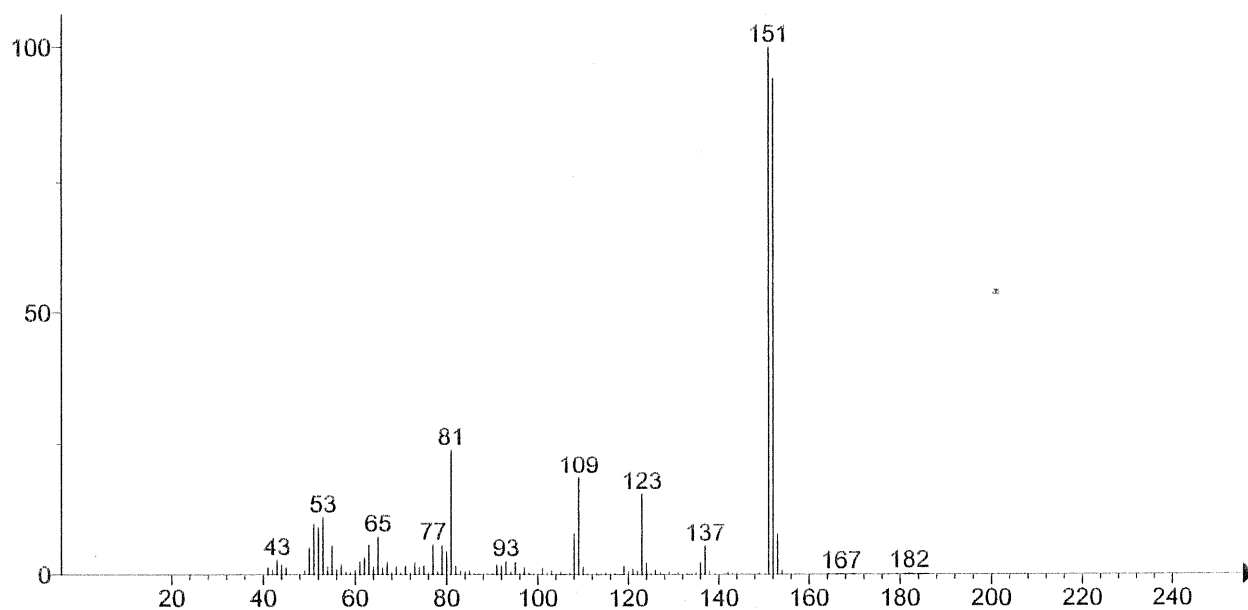
Synonyms:

no synonyms.

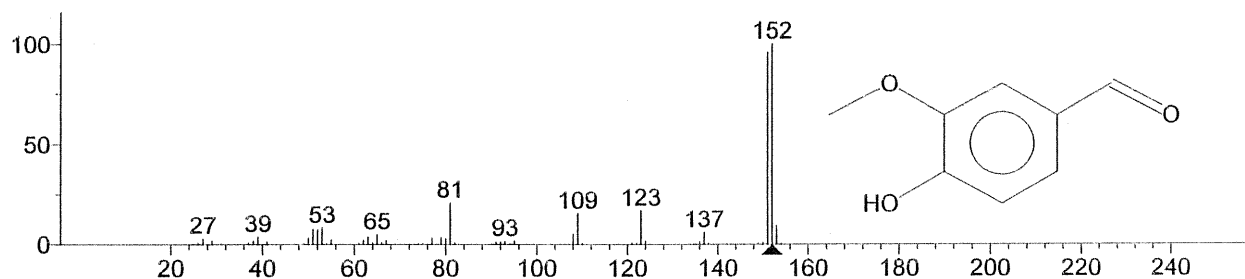
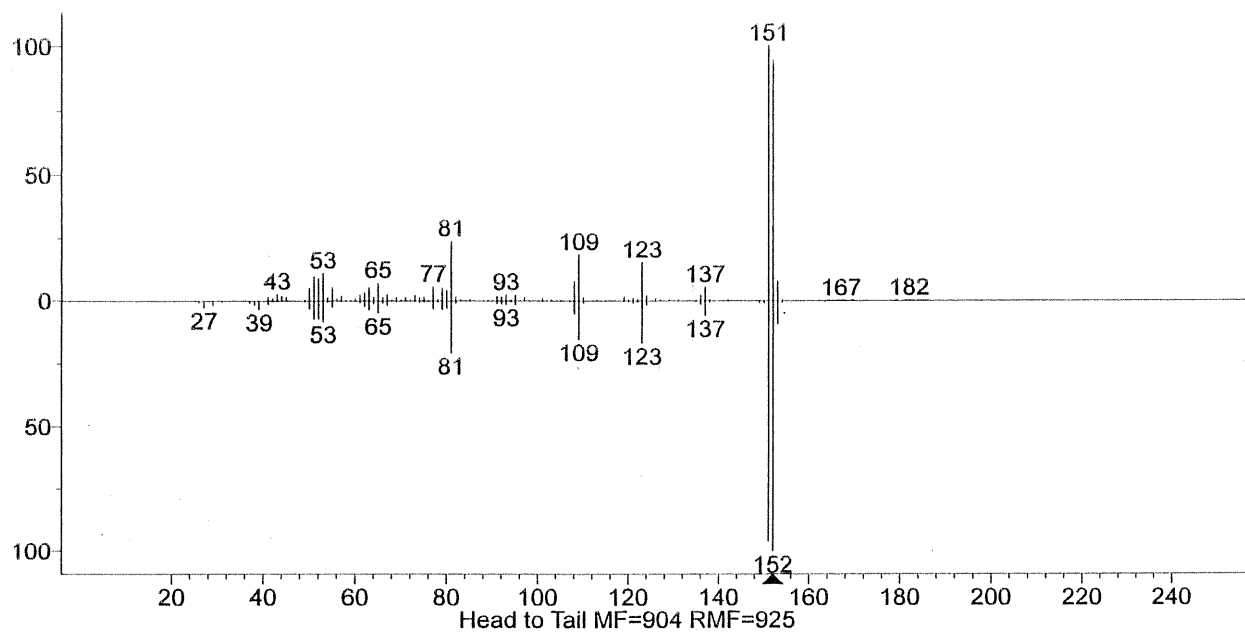
Estimated non-polar retention index (n-alkane scale):

Value: 1686 iu

Confidence interval (Diverse functional groups): 89(50%) 382(95%) iu



(Text File) +EI Scan (29.805 min) ALI-DRAG-H4-220421-.D



(replib) Vanillin

Name: Vanillin

Formula: C₈H₈O₃

MW: 152 CAS#: 121-33-5 NIST#: 192567 ID#: 20417 DB: replib

Other DBs: Fine, TSCA, RTECS, EPA, USP, HODOC, NIH, EINECS, IRDB

Contributor: Chemical Concepts

10 largest peaks:

152 999 | 151 957 | 81 206 | 123 167 | 109 152 | 153 92 | 53 81 | 51 72 | 52 71 | 137 58 |

Synonyms:

1. Benzaldehyde, 4-hydroxy-3-methoxy-
2. p-Hydroxy-m-methoxybenzaldehyde
3. Lioxin
4. Vanillaldehyde
5. Vanillic aldehyde
6. 2-Methoxy-4-formylphenol
7. 3-Methoxy-4-hydroxybenzaldehyde
8. 4-Formyl-2-methoxyphenol
9. 4-Hydroxy-3-methoxybenzaldehyde
10. 4-Hydroxy-5-methoxybenzaldehyde
11. Vanilla
12. m-Anisaldehyde, 4-hydroxy-
13. Protocatechualdehyde, methyl-
14. Zimco
15. 4-Hydroxy-m-anisaldehyde
16. p-Vanillin
17. Vanillin
18. m-Methoxy-p-hydroxybenzaldehyde
19. Methylprotocatechuic aldehyde
20. Methylprotocatechuic aldehyde

Estimated non-polar retention index (n-alkane scale):

Value: 1392 iu

Confidence interval (Diverse functional groups): 89(50%) 382(95%) iu

Retention index.

1. Value: 1403 iu

Column Type: Capillary

Column Class: Standard non-polar

Active Phase: BP-1

Column

Length: 50 m

Carrier Gas: He

Column Diameter: 0.22 mm

Phase Thickness: 0.25 µm

Data Type: Linear

RI

Program Type: Ramp

Start T: 60 C

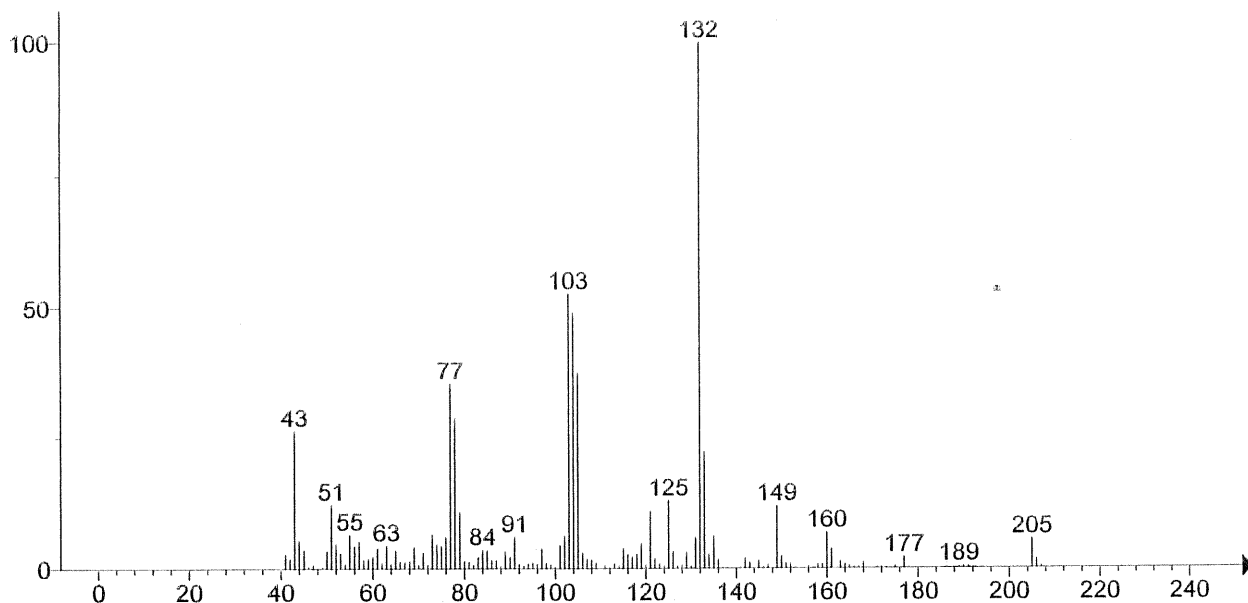
End T: 220 C

Heat Rate: 2 K/min

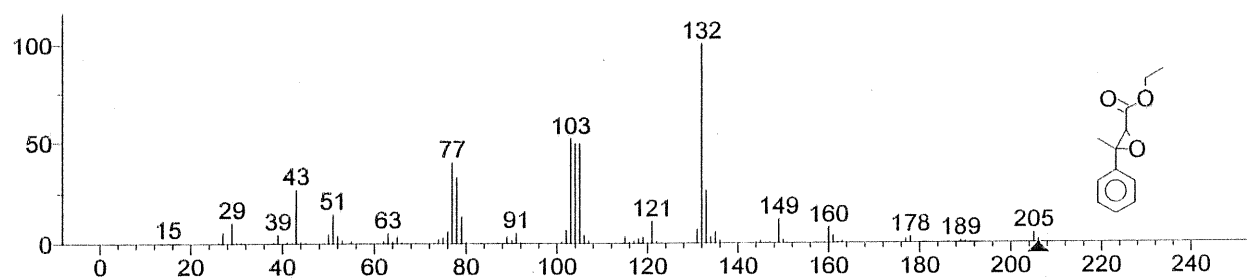
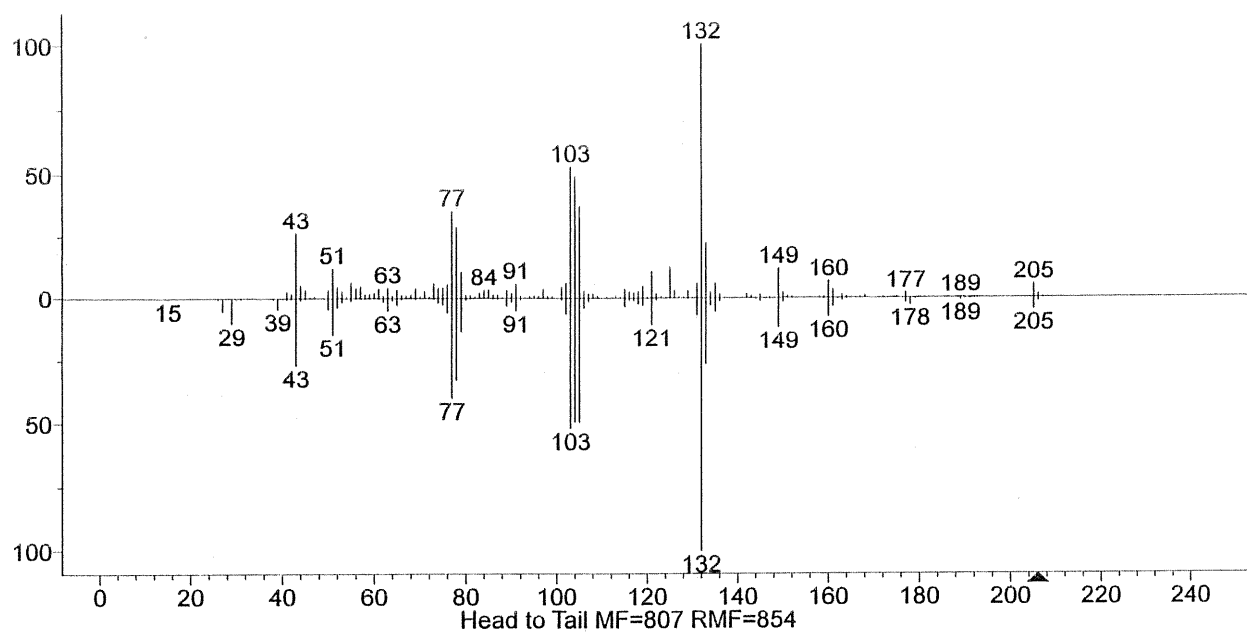
End Time: 20 min

Source:

Duquesnoy, E.; Dinh, N.H.; Castola, V.; Casanova, J., Composition of a Pyrolytic oil from *Cupressus funebris* Endl. of Vietnamese origin, *Flavour Fragr. J.*, 21, 2006, 453-457.



(Text File) +EI Scan (30.978 min) ALI-DRAG-H4-220421-.D



(mainlib) Oxiranecarboxylic acid, 3-methyl-3-phenyl-, ethyl ester, cis-

Name: Oxiranecarboxylic acid, 3-methyl-3-phenyl-, ethyl ester, cis-

Formula: $C_{12}H_{14}O_3$

MW: 206 CAS#: 19464-95-0 NIST#: 291516 ID#: 93991 DB: mainlib

Other DBs: NIH

Contributor: NIST Mass Spectrometry Data Center, 1998.

10 largest peaks:

132 999 | 103 517 | 105 494 | 104 493 | 77 399 | 78 327 | 43 268 | 133 264 | 51 146 | 79 134 |

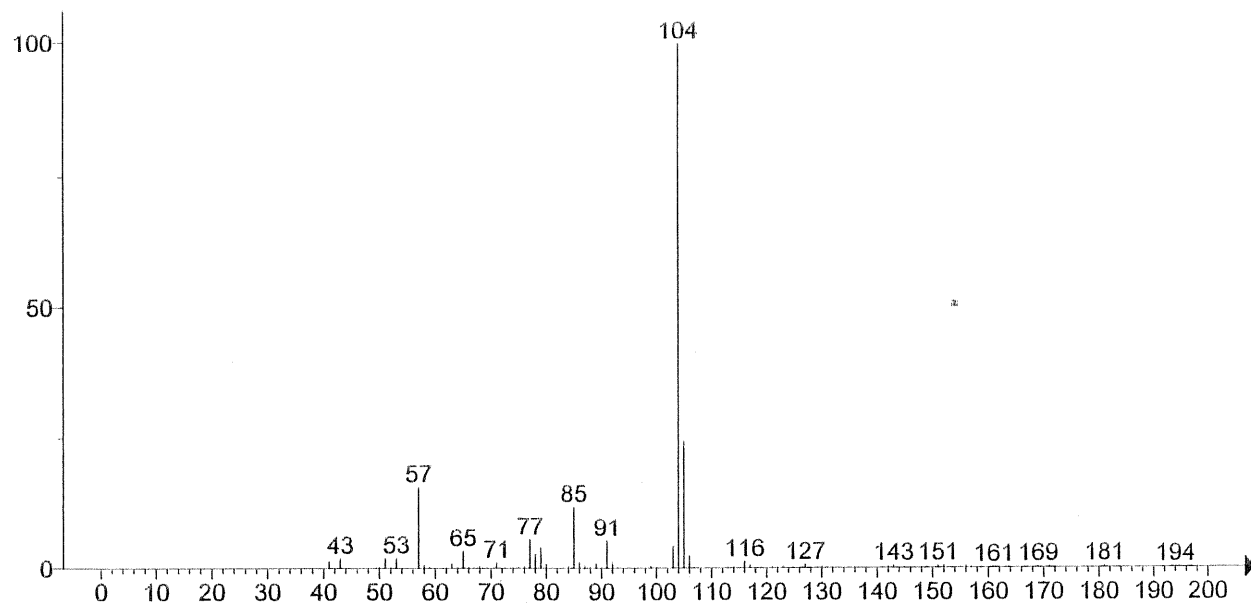
Synonyms:

- 1.cis-Ethyl 3-methyl-3-phenylglycidate
- 2.Ethyl-3-methyl-3-phenylglycidate
- 3.Hydrocinnamic acid, α,β -epoxy- β -methyl-, ethyl ester, stereoisomer
- 4.cis-3-Methyl-3-phenylglycidic acid, ethyl ester
- 5.Ethyl 3-methyl-3-phenyl-2-oxiranecarboxylate #
- 6.cis-3-Phenyl-3-methylglycidic acid, ethyl ester

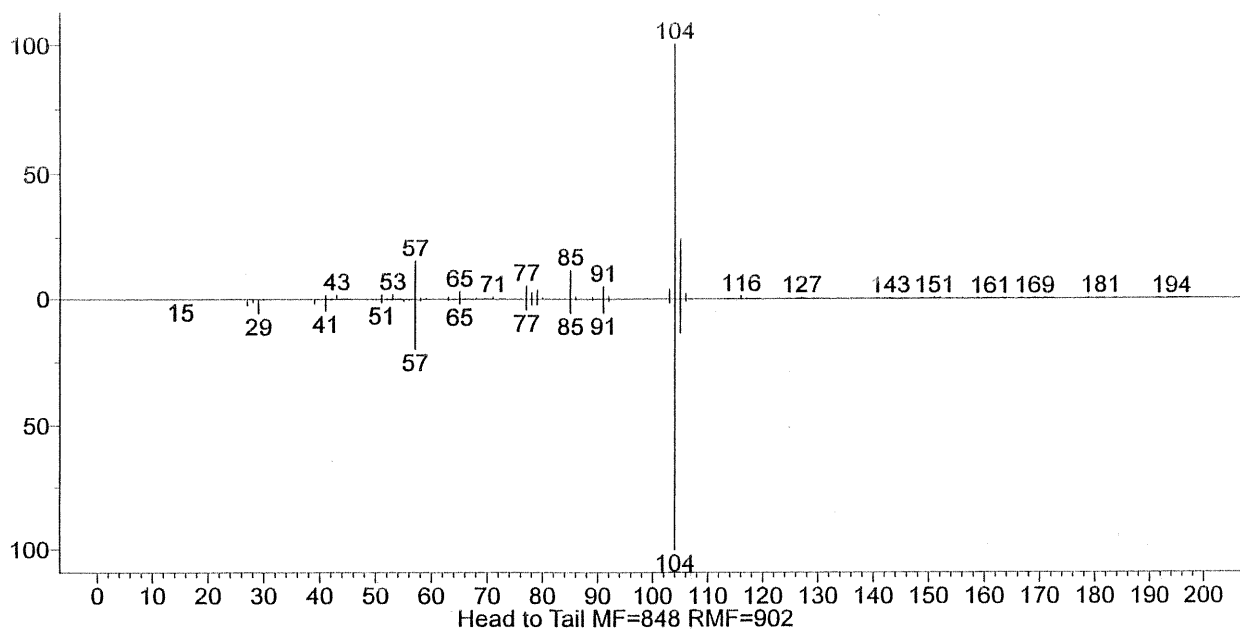
Estimated non-polar retention index (n-alkane scale):

Value: 1484 iu

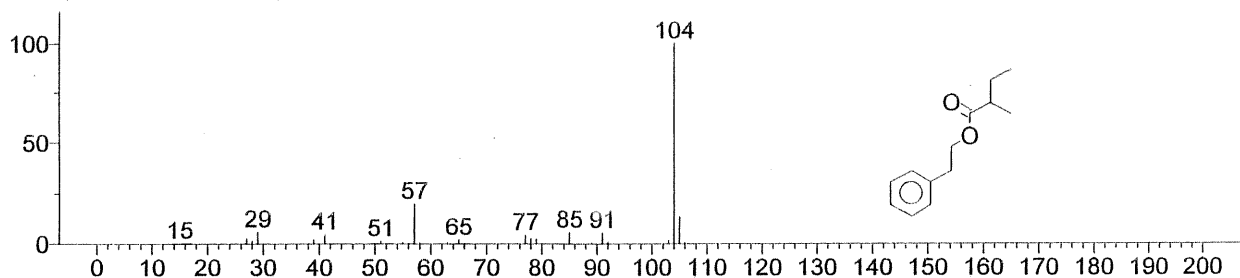
Confidence interval (Diverse functional groups): 89(50%) 382(95%) iu



(Text File) +EI Scan (32.738 min) ALI-DRAG-H4-220421-.D Subtract



Head to Tail MF=848 RMF=902



(mainlib) Butanoic acid, 2-methyl-, 2-phenylethyl ester

Name: Butanoic acid, 2-methyl-, 2-phenylethyl ester

Formula: C₁₃H₁₈O₂

MW: 206 CAS#: 24817-51-4 NIST#: 118042 ID#: 65225 DB: mainlib

Other DBs: TSCA, RTECS, EINECS

Contributor: Chuck Anderson, Aldrich Chemical Co.

10 largest peaks:

104 999 | 57 197 | 105 135 | 29 57 | 85 56 | 91 55 | 41 47 | 77 43 | 27 26 | 78 25 |

Synonyms:

1. Phenethyl 2-methylbutyrate

2. Phenylethyl 2-methyl butyrate

3. 2-Phenylethyl 2-methylbutanoate #

Estimated non-polar retention index (n-alkane scale):

Value: 1493 iu

Confidence interval (Esters): 47(50%) 201(95%) iu

Retention index.

1. Value: 1460 iu

Column Type: Capillary

Column Class: Standard non-polar

Active Phase: RTX-1

Column

Length: 60 m

Carrier Gas: He

Column Diameter: 0.22 mm

Phase Thickness: 0.25 µm

Data Type: Linear

RI

Program Type: Ramp

Start T: 60 C

End T: 230 C

Heat Rate: 2 K/min

End Time: 35 min

Source: Paolini, J.;

Costa, J.; Bernardini, A., Analysis of the essential oil from aerial parts of *Eupatorium cannabinum* subsp. *corsicum* (L.) by gas chromatography with electron impact and chemical ionization mass spectrometry, J. Chromatogr. A, 1076, 2005, 170-178.

2. Value: 1466 iu

Column Type: Capillary

Column Class: Standard non-polar

Active

Phase: DB-1

Column Length: 30 m

Carrier Gas: He

Phase Thickness: 0.25 µm

Data Type: Normal alkane

RI

Program Type: Ramp

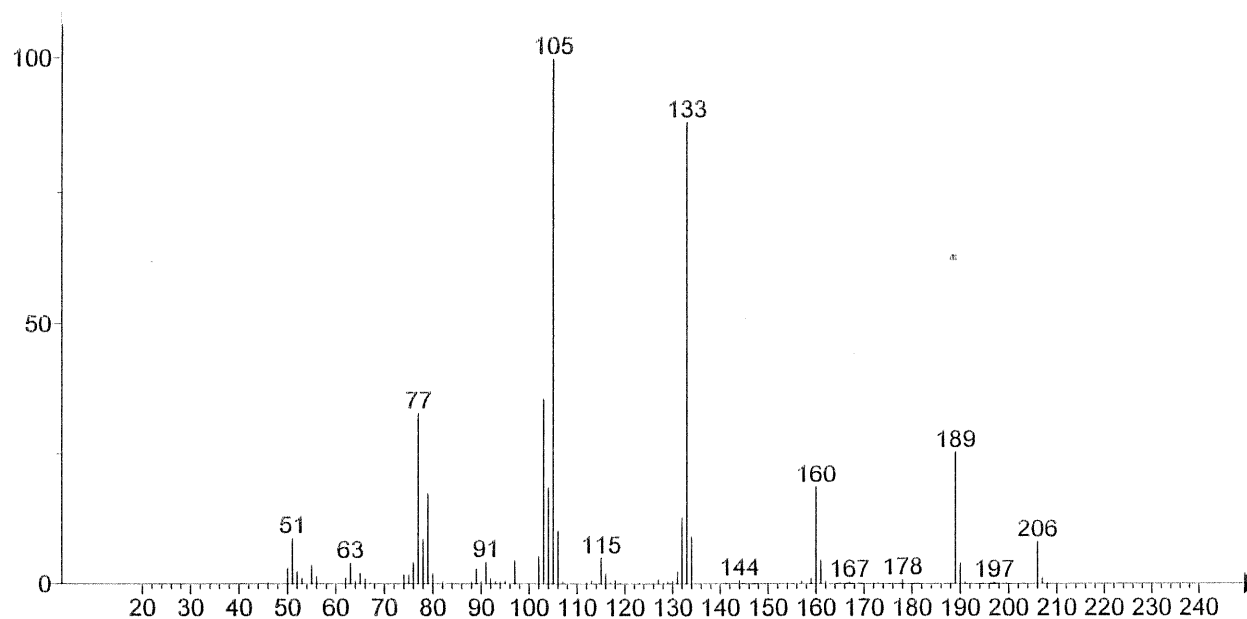
Start T: 50 C

End T: 220 C

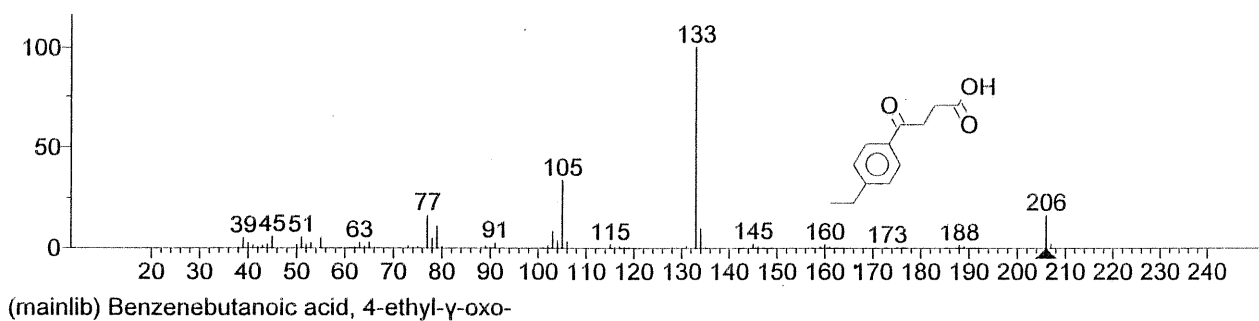
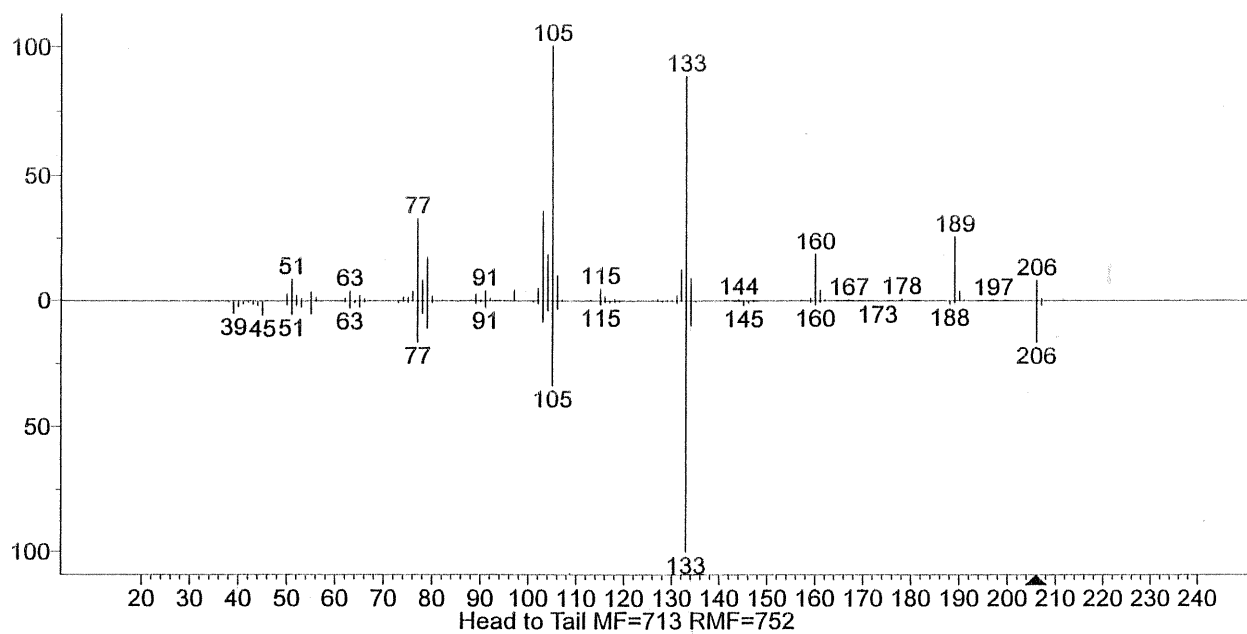
Heat Rate: 6 K/min

Start Time: 2 min

End Time: 20



(Text File) +EI Scan (33.038 min) ALI-DRAG-H4-220421-.D Subtract



Name: Benzenebutanoic acid, 4-ethyl-γ-oxo-

Formula: C₁₂H₁₄O₃

MW: 206 CAS#: 49594-75-4 NIST#: 271880 ID#: 94812 DB: mainlib.

Other DBs: None

Contributor: A.A.Kutin, Moscow, Russia

10 largest peaks:

133 999 | 105 335 | 206 164 | 77 163 | 79 110 | 134 98 | 103 84 | 45 57 | 51 54 | 55 53 |

Synonyms:

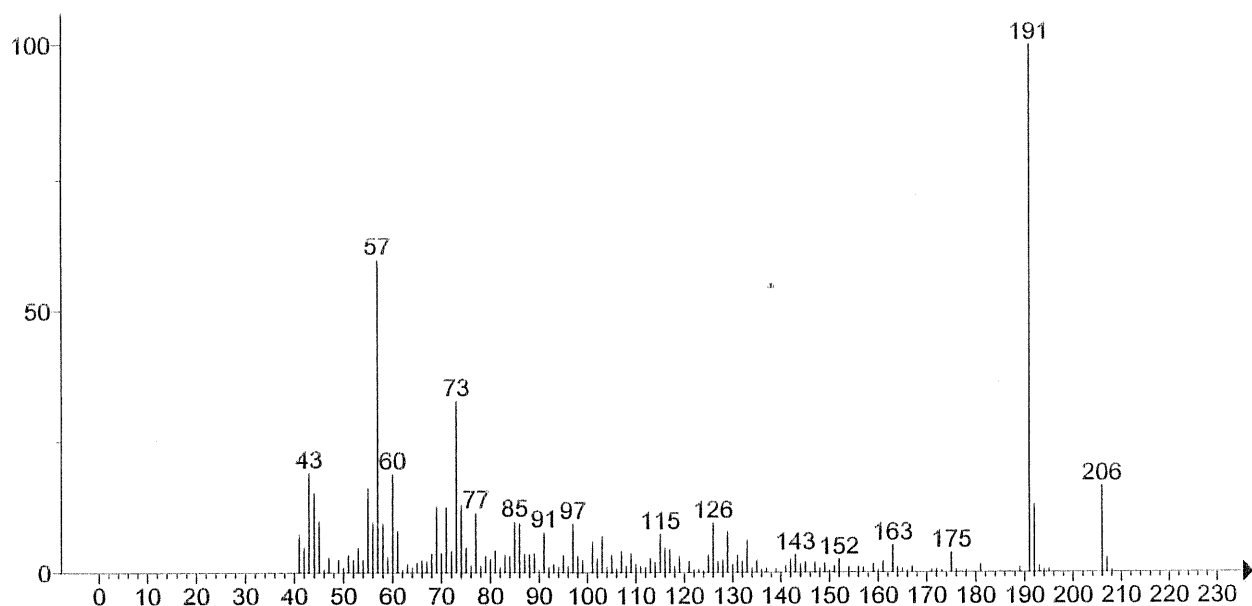
1.3-(4-Ethylbenzoyl)propionic acid

2.4-(4-Ethylphenyl)-4-oxobutanoic acid

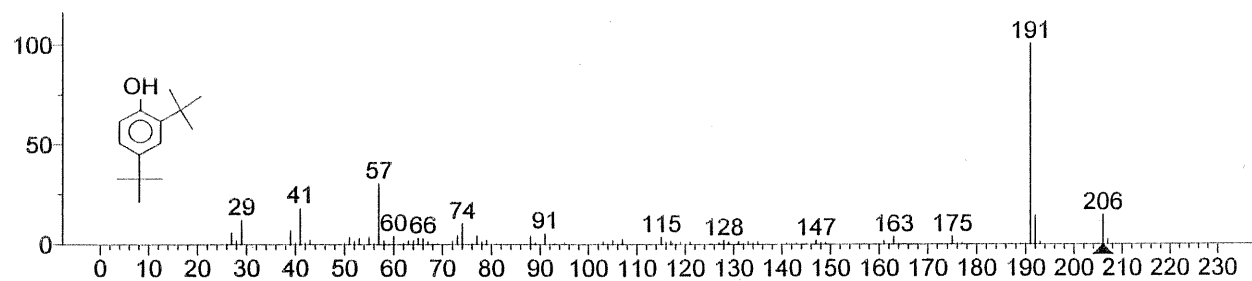
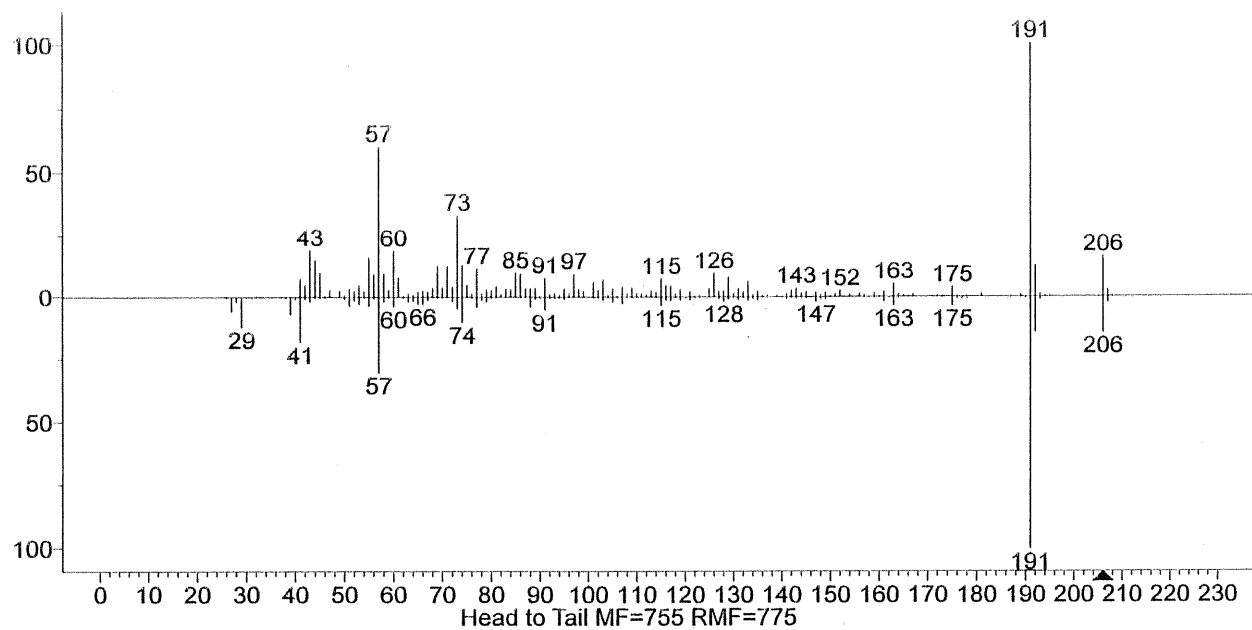
Estimated non-polar retention index (n-alkane scale):

Value: 1797 iu

Confidence interval (Diverse functional groups): 89(50%) 382(95%) iu



(Text File) +EI Scan (33.266 min) ALI-DRAG-H4-220421-.D



(replib) Phenol, 2,4-bis(1,1-dimethylethyl)-

Name: Phenol, 2,4-bis(1,1-dimethylethyl)-

Formula: C₁₄H₂₂O

MW: 206 CAS#: 96-76-4 NIST#: 22572 ID#: 23668 DB: replib

Other DBs: Fine, TSCA, RTECS, EPA, HODOC, NIH, EINECS, IRDB

10 largest peaks:

191 999 | 57 302 | 41 181 | 206 145 | 192 143 | 29 121 | 74 102 | 39 71 | 27 58 | 91 53 |

Synonyms:

1. Phenol, 2,4-di-tert-butyl-

2. 2,4-Di-tert-butylphenol

3. 2,4-di-t-Butylphenol

4. 1-Hydroxy-2,4-di-tert-butylbenzene

5. Antioxidant No. 33

6. Prodox 146

7. Prodox 146A-85X

8. 2,4-Bis(1,1-dimethylethyl)phenol

Estimated non-polar retention index (n-alkane scale):

Value: 1555 iu

Confidence interval (Phenols): 70(50%) 301(95%) iu

Retention index.

1. Value: 1539 iu

Column Type: Packed

Column Class: Standard non-polar

Active Phase: SE-30

Column

Length: 2 m

Substrate: GasChrom Q

Data Type: Linear RI

Program Type: Ramp

Start T: 80 C

End T: 250

C

Heat Rate: 4 K/min

Source: Staniewski, J., Gas chromatographic analysis of some hydroxyoxime extractants of metals, Chem. Anal. (Warsaw), 36(2), 1991, 325-333.

2. Value: 1519 iu

Column Type: Packed

Column Class:

Standard non-polar

Active Phase: SE-30

Column Length: 3 m

Carrier Gas: He

Substrate: N_AW_HMDS

Data

Type: Kovats RI

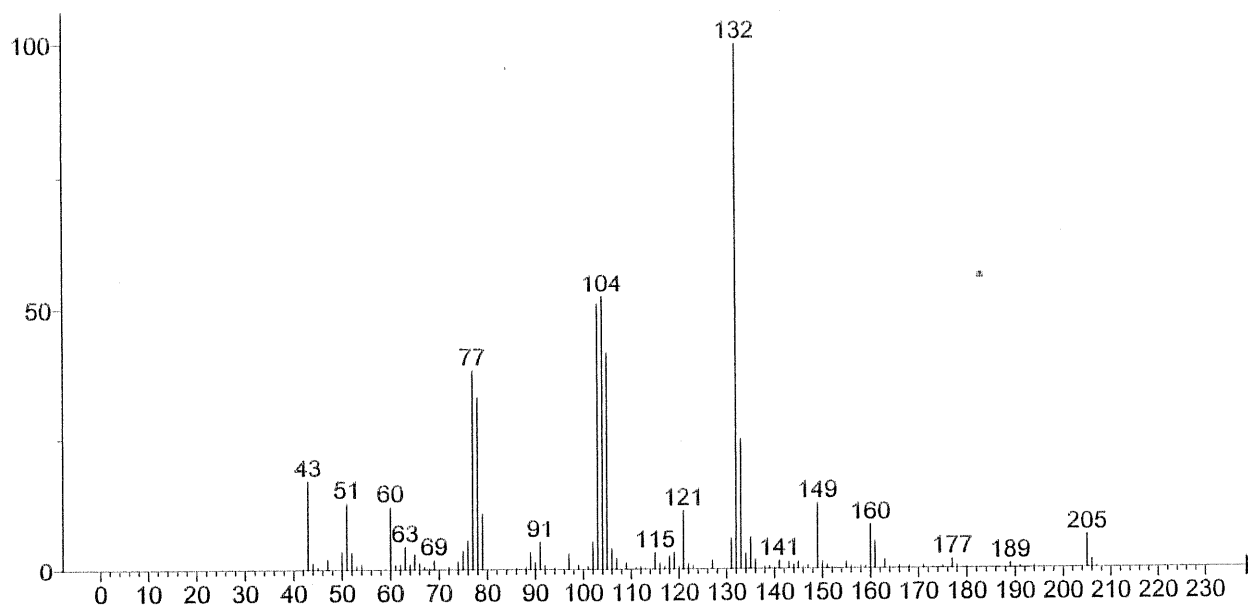
Program Type: Isothermal

Start T: 523 K

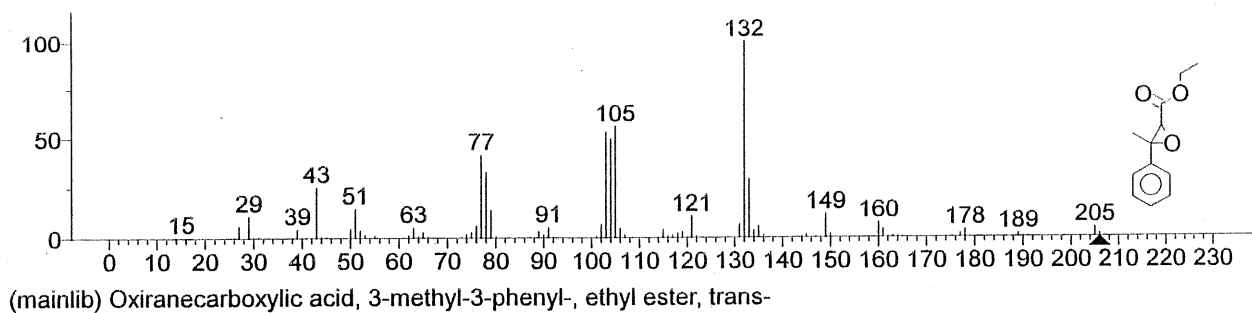
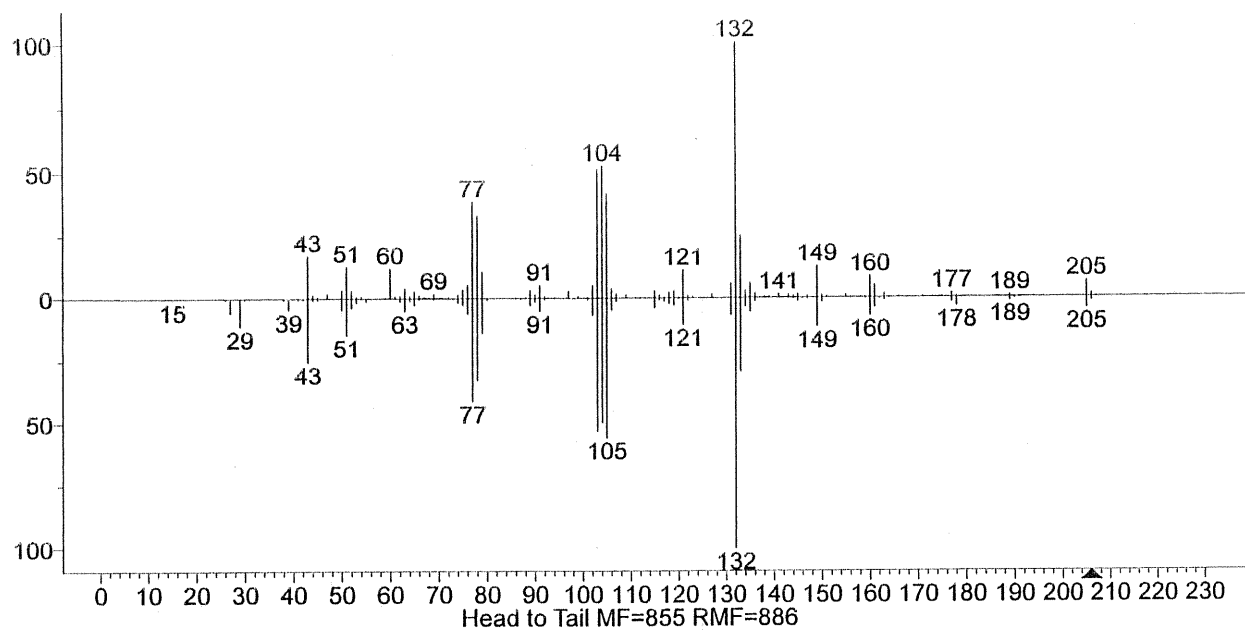
Source: Verevkin, S.P.; Nesterov, O.A.; Rempel, P.D.;

Synkova, N.V.; Shashkin, N.P., Chromatographic determination of the products of condensation of alkylphenols with formic aldehyde, Zh. Anal. Khim., 43, 1990, 760-761.

<...>



(Text File) +EI Scan (33.854 min) ALI-DRAG-H4-220421-.D Subtract



(mainlib) Oxiranecarboxylic acid, 3-methyl-3-phenyl-, ethyl ester, trans-

Name: Oxiranecarboxylic acid, 3-methyl-3-phenyl-, ethyl ester, trans-

Formula: C₁₂H₁₄O₃

MW: 206 CAS#: 19464-92-7 NIST#: 291517 ID#: 94061 DB: mainlib

Other DBs: None

Contributor: NIST Mass Spectrometry Data Center, 1998.

10 largest peaks:

132 999 | 105 557 | 103 531 | 104 496 | 77 413 | 78 327 | 133 293 | 43 253 | 51 145 | 79 138 |

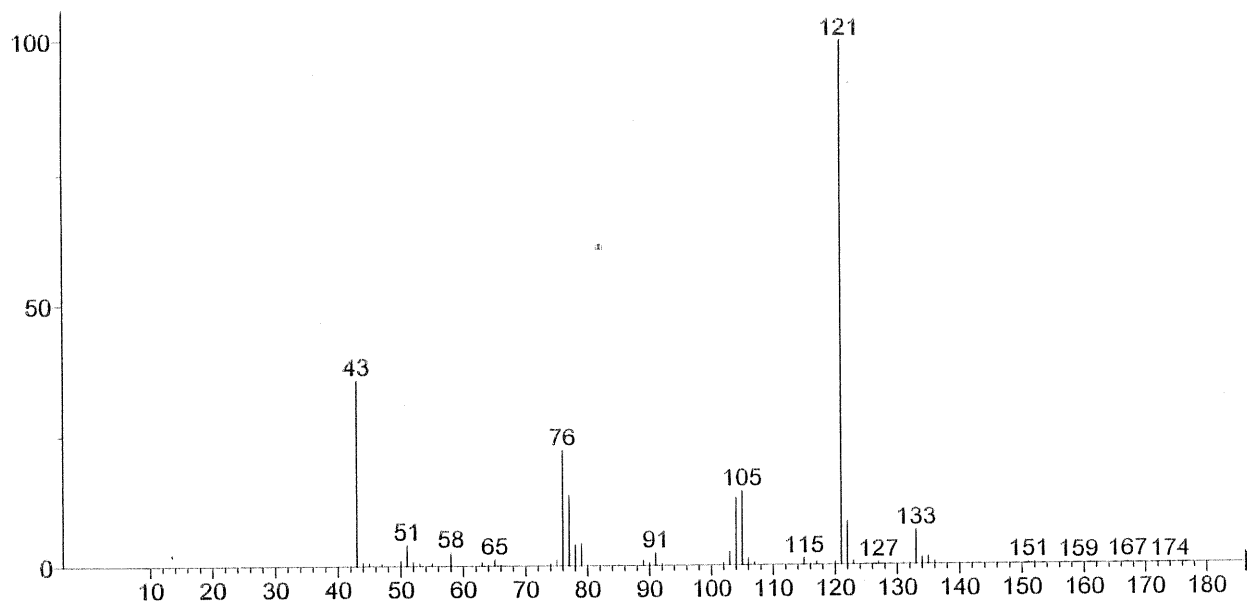
Synonyms:

- 1.trans-Ethyl 3-Methyl-3-phenylglycidate
- 2.Hydrocinnamic acid, α,β -epoxy- β -methyl-, ethyl ester, trans-
- 3.Hydrocinnamic acid, α,β -epoxy- β -methyl-, ethyl ester, stereoisomer
- 4.trans-3-Methyl-3-phenylglycidic acid, ethyl ester
- 5.Ethyl 3-methyl-3-phenyl-2-oxiranecarboxylate #
- 6.trans-3-Phenyl-3-methylglycidic acid, ethyl ester

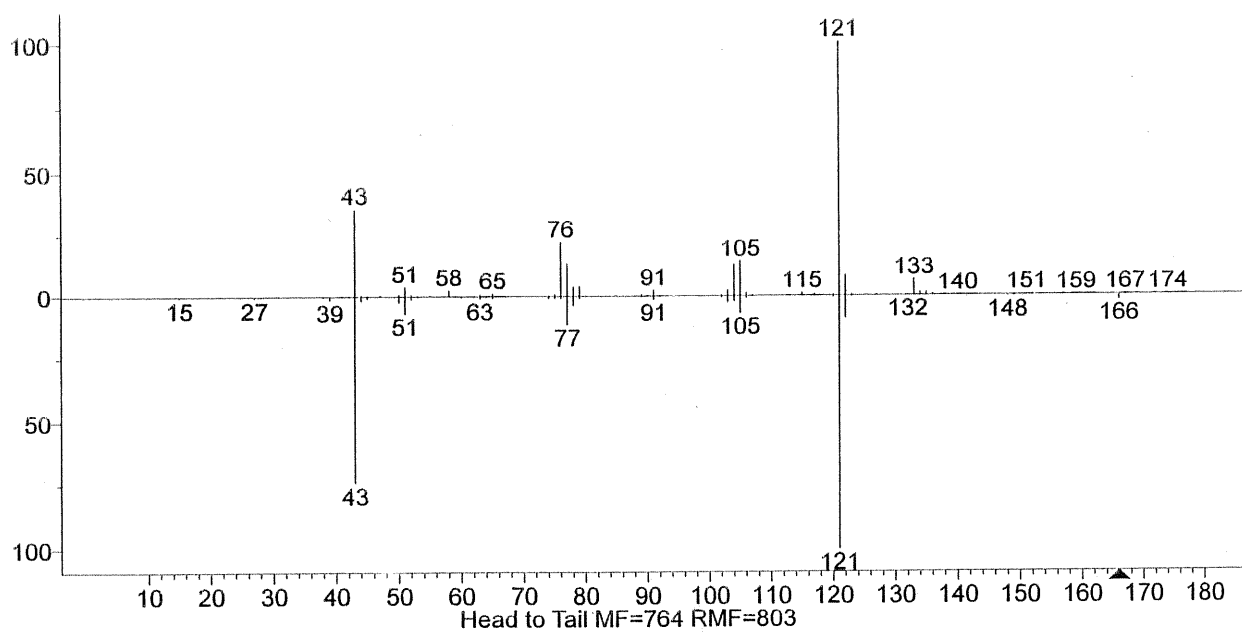
Estimated non-polar retention index (n-alkane scale):

Value: 1484 iu

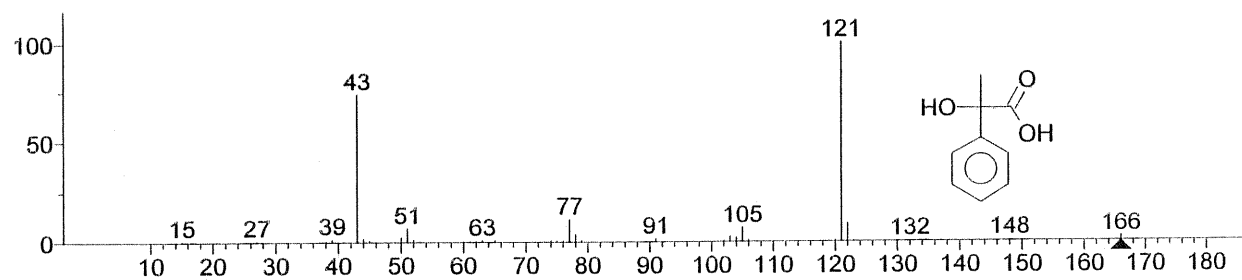
Confidence interval (Diverse functional groups): 89(50%) 382(95%) iu



(Text File) +EI Scan (35.133 min) ALI-DRAG-H4-220421-.D Subtract



Head to Tail MF=764 RMF=803



(mainlib) Benzeneacetic acid, α -hydroxy- α -methyl-, (\pm)-

41
Name: Benzeneacetic acid, α -hydroxy- α -methyl-, (\pm)-

Formula: $C_9H_{10}O_3$

MW: 166 CAS#: 4607-38-9 NIST#: 244949 ID#: 82980 DB: mainlib

Other DBs: TSCA, HODOC, NIH, EINECS

Contributor: Japan AIST/NIMC Database- Spectrum MS-IW-5150

10 largest peaks:

121 999 | 43 738 | 77 114 | 122 91 | 105 70 | 51 69 | 78 37 | 103 26 | 50 23 | 104 22 |

Synonyms:

1.DL- α -Phenyllactic acid

2.DL-Atrolactic acid

3.Mandelic acid, α -methyl-, DL-

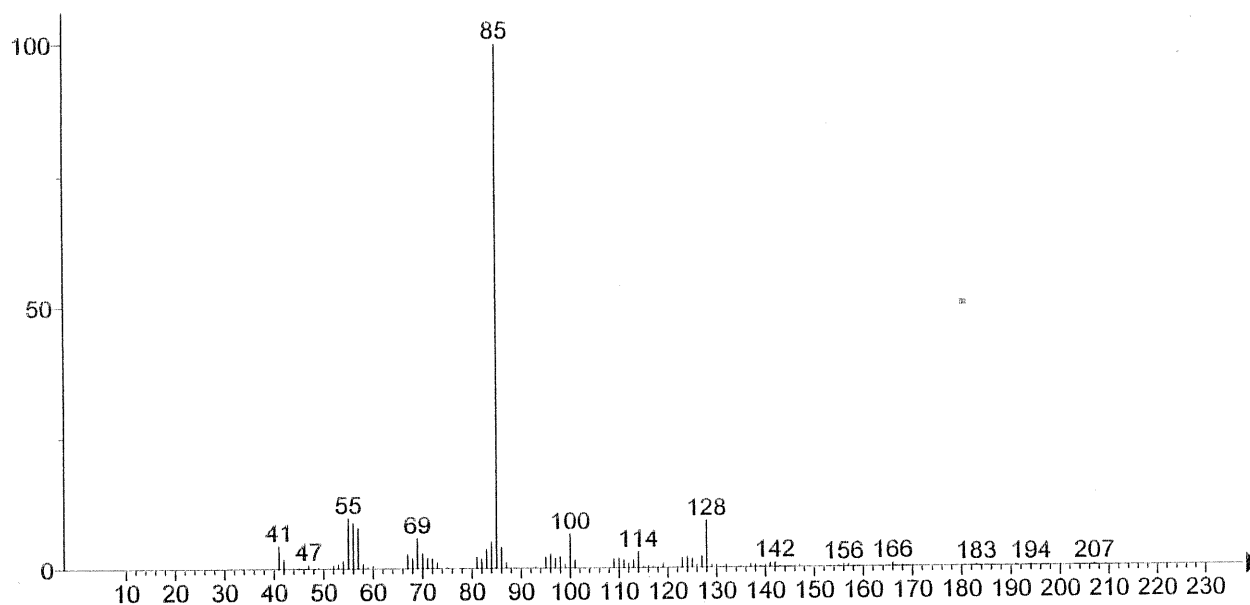
4.Benzeneacetic acid, α -hydroxy- α -methyl-, (.+.-)-

5.2-Hydroxy-2-phenylpropanoic acid #

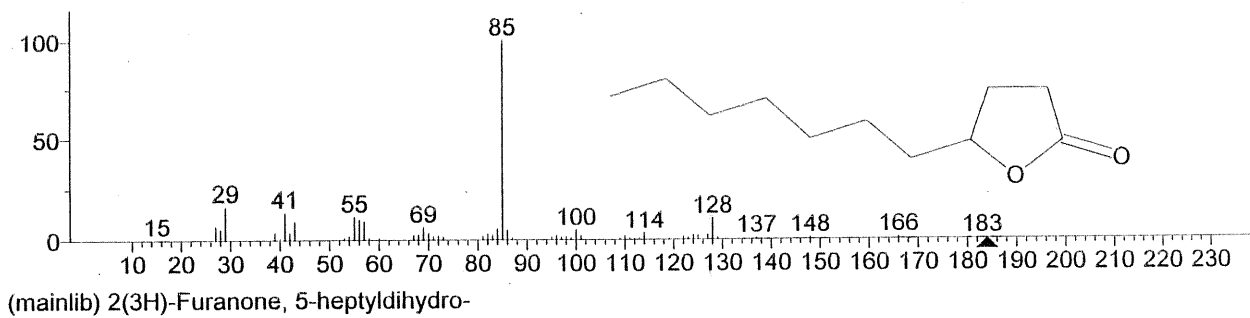
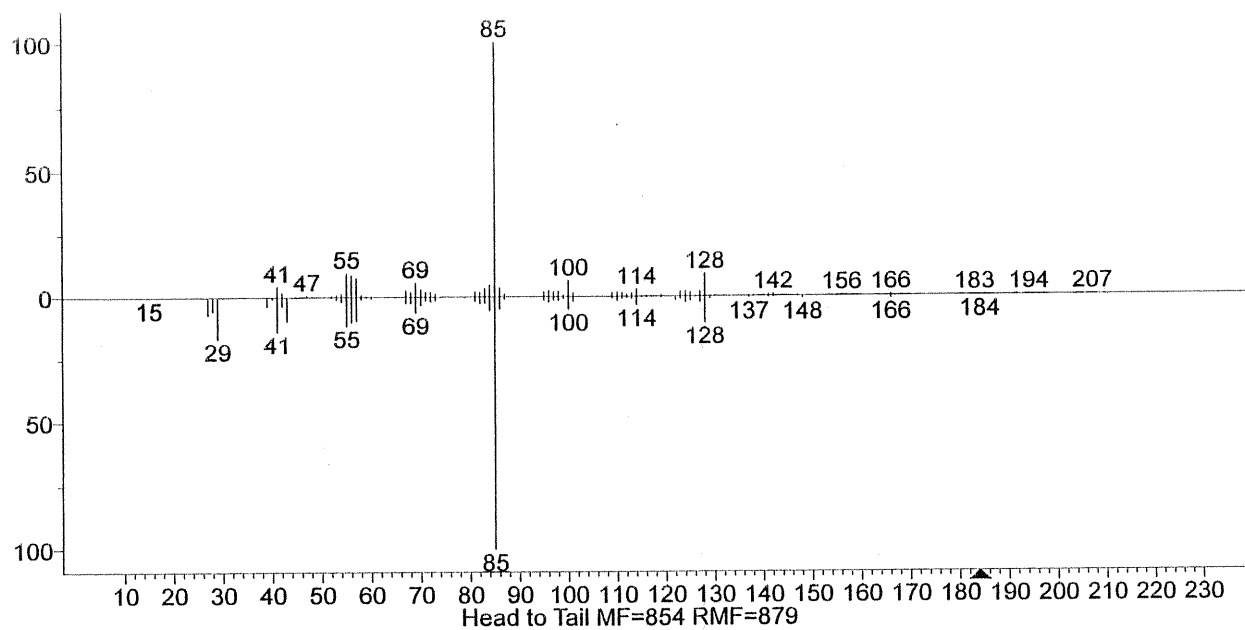
Estimated non-polar retention index (n-alkane scale):

Value: 1441 iu

Confidence interval (Diverse functional groups): 89(50%) 382(95%) iu



(Text File) +EI Scan (35.226 min) ALI-DRAG-H4-220421-.D Subtract



(mainlib) 2(3H)-Furanone, 5-heptyldihydro-

Name: 2(3H)-Furanone, 5-heptyldihydro-

Formula: C₁₁H₂₀O₂

MW: 184 CAS#: 104-67-6 NIST#: 7793 ID#: 46596 DB: mainlib

Other DBs: Fine, TSCA, RTECS, HODOC, NIH, EINECS

10 largest peaks:

85 999 | 29 165 | 41 137 | 55 115 | 128 104 | 56 100 | 43 94 | 57 93 | 27 70 | 69 62 |

Synonyms:

1. δ-Undecalactone
2. γ-n-Heptylbutyrolactone
3. γ-Heptyl-γ-butyrolactone
4. γ-Heptylbutyrolactone
5. γ-Undecalactone
6. γ-Undecanolactone
7. γ-Undecanolide
8. Peach lactone
9. Persicol
10. Undecanoic acid, 4-hydroxy-, γ-lactone
11. 4-Hydroxyundecanoic acid lactone
12. Undecanoic γ-lactone
13. Undecanolide-1,4
14. γ-Undecalatone
15. Aldehyde C-14
16. Aldehyde C-14 peach
17. Peach aldehyde
18. 1,4-Undecanolide
19. 4-Hydroxyundecanoic acid, γ-lactone
20. 4-Undecanolide
21. γ-Undekalakton
22. 5-Heptyldihydro-2(3H)-furanone #

Estimated non-polar retention index (n-alkane scale):

Value: 1483 iu

Confidence interval (Esters): 47(50%) 201(95%) iu

Retention index.

1. Value: 1521.0 iu

Column Type: Capillary

Column Class: Standard non-polar

Active Phase: DB-1

Column

Length: 30 m

Carrier Gas: He

Column Diameter: 0.25 mm

Phase Thickness: 0.25 μm

Data Type: Linear

RI

Program Type: Ramp

Start T: 40 C

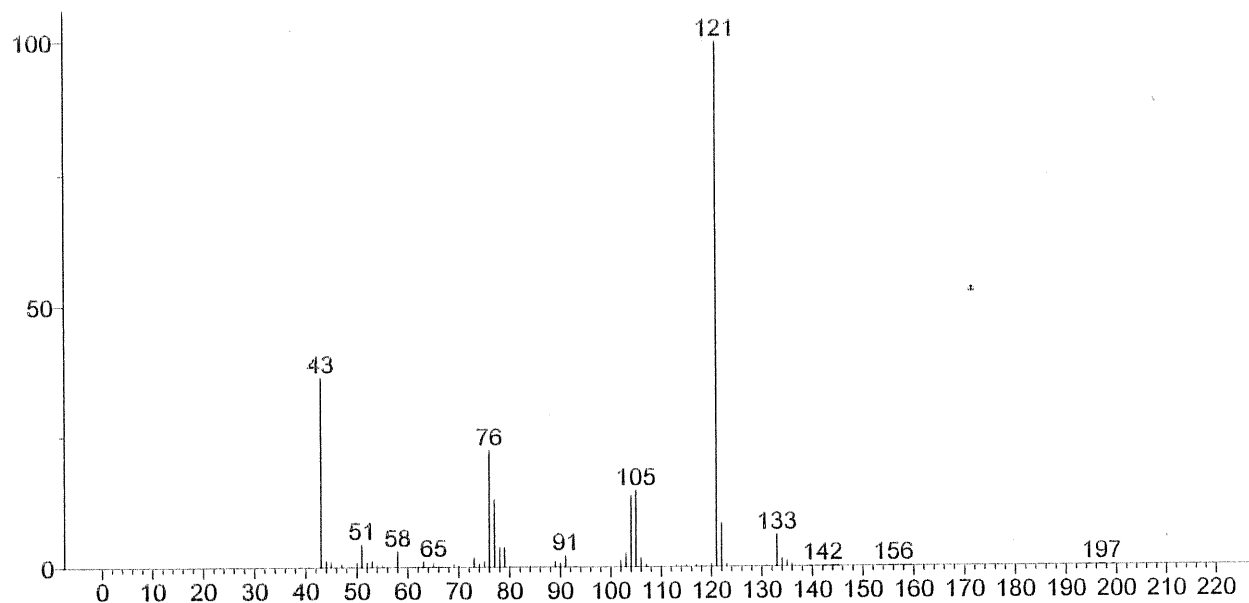
End T: 325 C

Heat Rate: 3 K/min

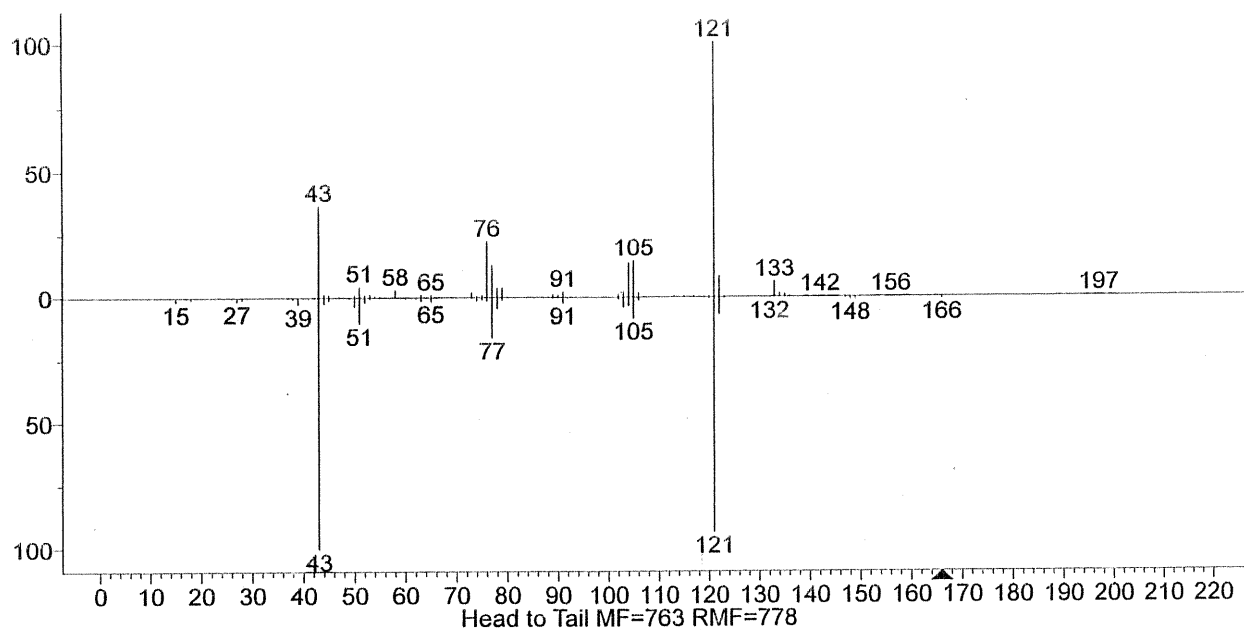
Source: Sun, G.; Strempel, P.,

Retention index characterization of flavor, fragrance, and many other compounds on DB-1 and DB-XLB, 2003.

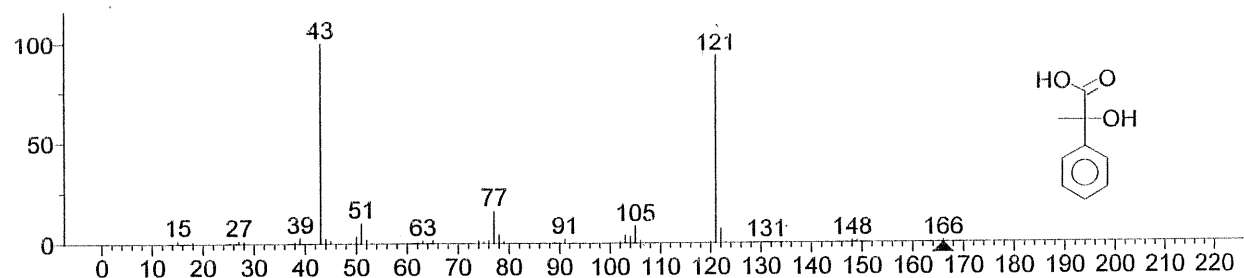
2.



(Text File) +EI Scan (35.878 min) ALI-DRAG-H4-220421-.D Subtract



Head to Tail MF=763 RMF=778



(mainlib) Benzeneacetic acid, α -hydroxy- α -methyl-

Name: Benzeneacetic acid, α -hydroxy- α -methyl-

Formula: $C_9H_{10}O_3$

MW: 166 CAS#: 515-30-0 NIST#: 234792 ID#: 10592 DB: mainlib

Other DBs: Fine, TSCA, HODOC, NIH, EINECS

Contributor: Japan AIST/NIMC Database- Spectrum MS-NW-7445

10 largest peaks:

43 999 | 121 932 | 77 160 | 51 102 | 105 83 | 122 70 | 78 45 | 103 40 | 50 36 | 104 34 |

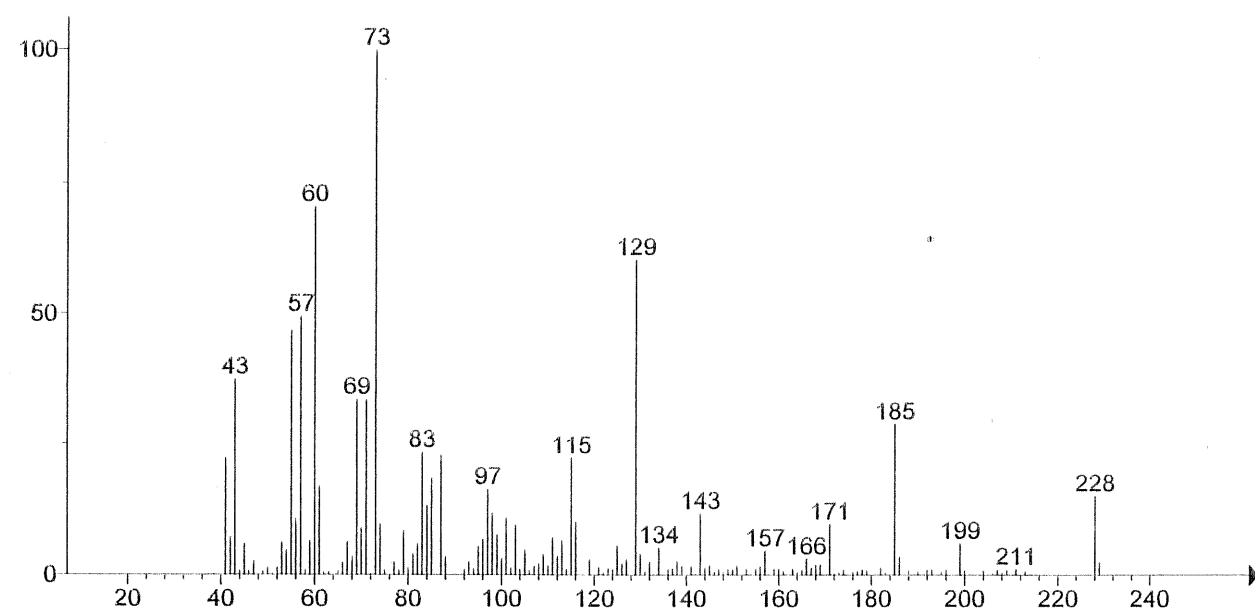
Synonyms:

1. Mandelic acid, α -methyl-
2. α -Hydroxy- α -phenylpropionic acid
3. α -Phenyllactic acid
4. Atrolactic acid
5. 2-Hydroxy-2-phenylpropionic acid
6. 2-Phenyl-2-hydroxypropionic acid
7. 2-Phenyllactic acid
8. dl-Atrolactic acid
9. 2-Hydroxy-2-phenylpropanoic acid #

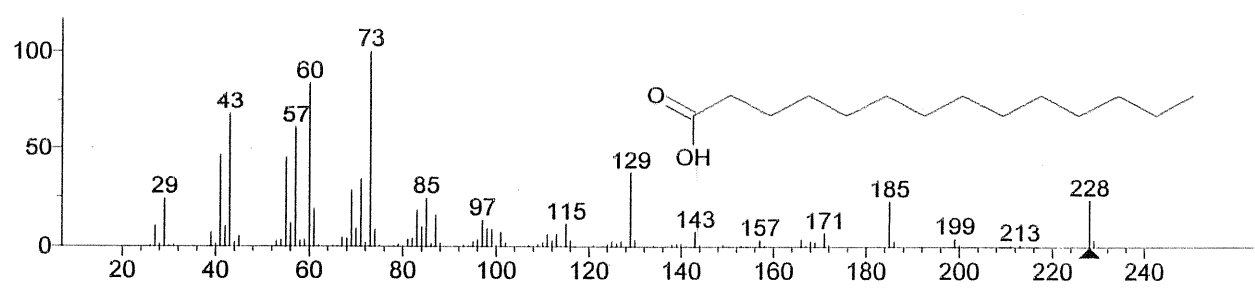
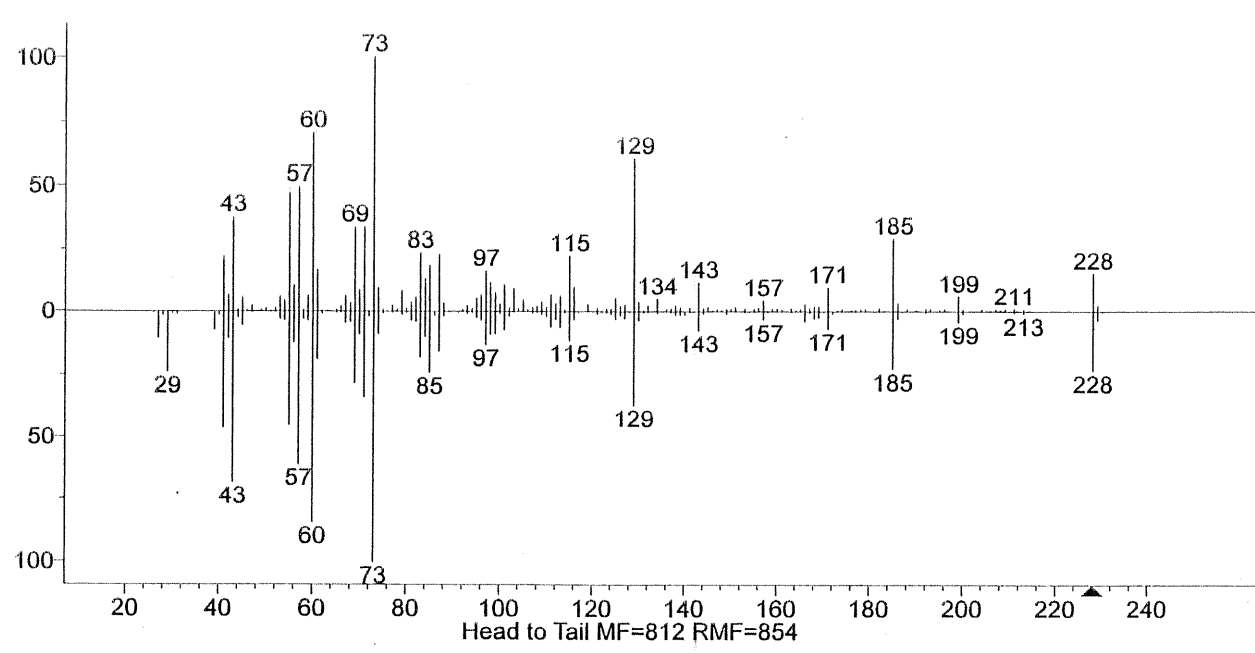
Estimated non-polar retention index (n-alkane scale):

Value: 1441 iu

Confidence interval (Diverse functional groups): 89(50%) 382(95%) iu



(Text File) +EI Scan (40.258 min) ALI-DRAG-H4-220421-.D Subtract



(replib) Tetradecanoic acid

Name: Tetradecanoic acid

Formula: C₁₄H₂₈O₂

MW: 228 CAS#: 544-63-8 NIST#: 189107 ID#: 8471 DB: replib

Other DBs: Fine, TSCA, RTECS, EPA, HODOC, NIH, EINECS, IRDB

Contributor: Chemical Concepts

10 largest peaks:

73 999 | 60 841 | 43 681 | 57 609 | 41 461 | 55 451 | 129 371 | 71 338 | 69 282 | 85 241 |

Synonyms:

1. Myristic acid
2. n-Tetradecanoic acid
3. n-Tetradecoic acid
4. Neo-Fat 14
5. Univol U 316S
6. 1-Tridecanecarboxylic acid
7. Coconut oil fatty acids
8. Crodacid
9. Emery 655
10. Hydrofol acid 1495
11. Hystrene 9014
12. n-Tetradecan-1-oic acid
13. Emery 654
14. Hystrene 9514
15. Philacid 1400
16. Prifac 2940
17. Prifrac 2940
18. Univol U 3165
19. Univol U320

Estimated non-polar retention index (n-alkane scale):

Value: 1769 iu

Confidence interval (Carboxylic acids): 51(50%) 220(95%) iu

Retention index.

1. Value: 1748 iu

Column Type: Capillary

Column Class: Standard non-polar

Active Phase: RTX-1

Column

Length: 60 m

Carrier Gas: He

Column Diameter: 0.22 mm

Phase Thickness: 0.25 um

Data Type: Linear

RI

Program Type: Ramp

Start T: 60 C

End T: 230 C

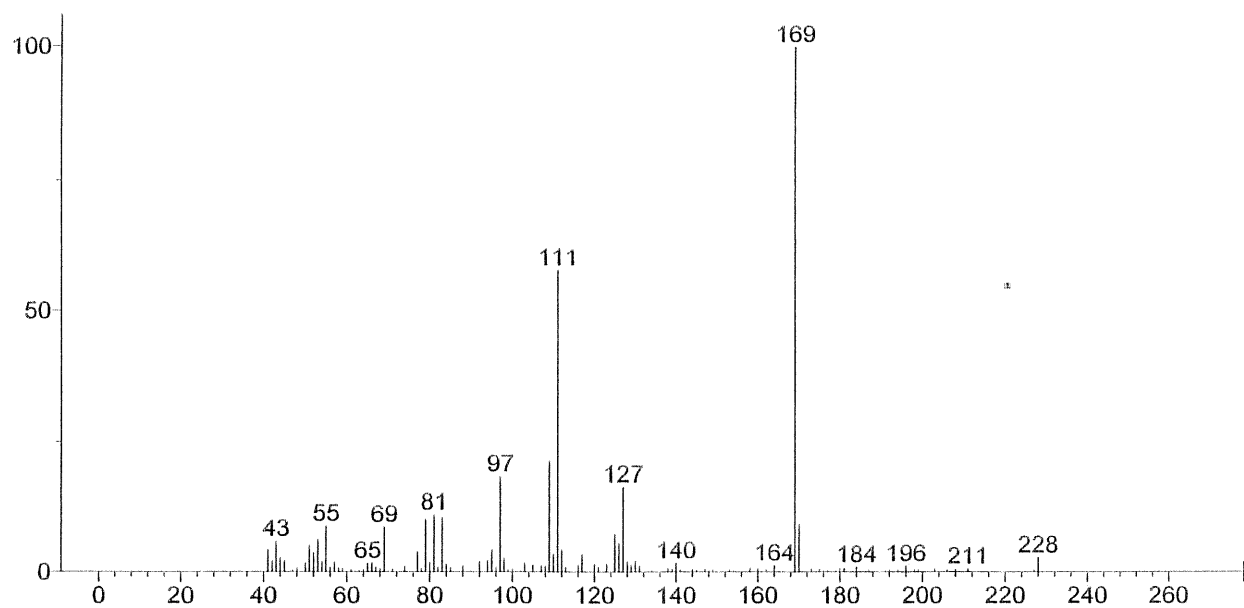
Heat Rate: 2 K/min

End Time: 35 min

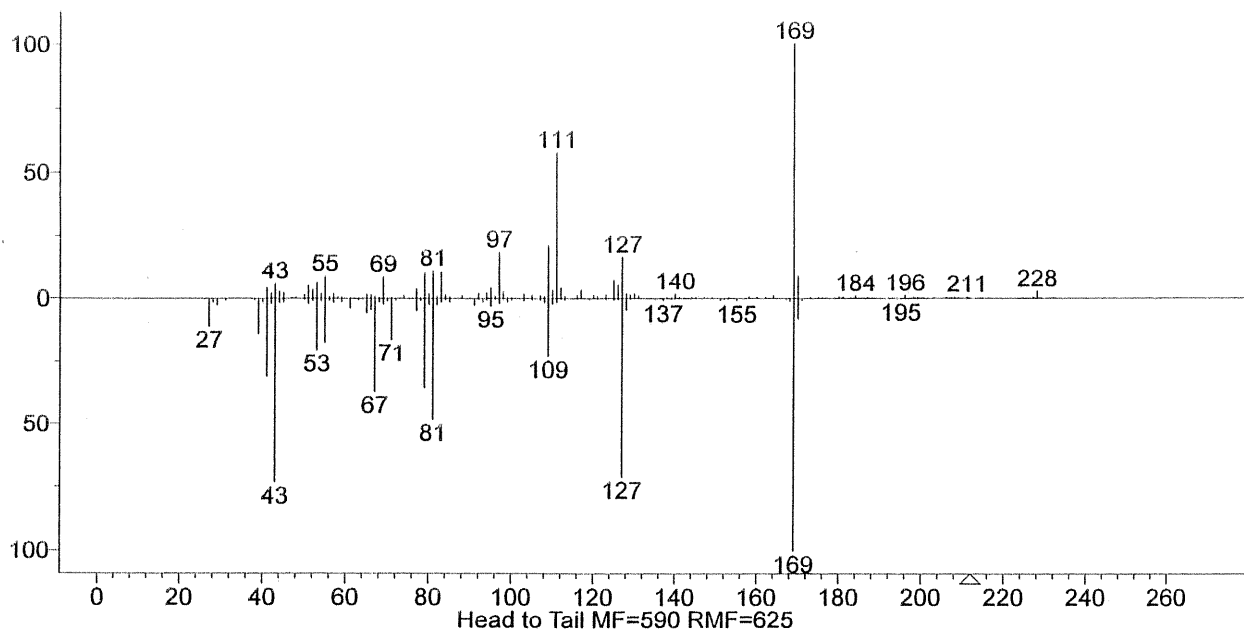
Source: Paolini, J.;

Muselli, A.; Bernardini, A.-F.; Bighelli, A.; Casanova, J.; Costa, J., Thymol derivatives from essential oil of *Doronicum corsicum* L., *Flavour Fragr. J.*, 22, 2007, 479-487.

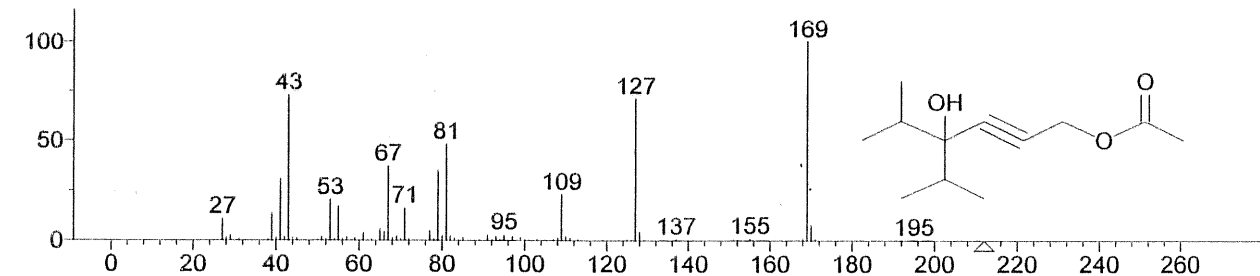
2. Value: 1772 iu



(Text File) +EI Scan (42.771 min) ALI-DRAG-H4-220421-.D Subtract



Head to Tail MF=590 RMF=625



(mainlib) Acetate, [4-hydroxy-4-(1-methylethyl)-5-methyl-2-hexynyl] ester

Name: Acetate, [4-hydroxy-4-(1-methylethyl)-5-methyl-2-hexynyl] ester

Formula: $C_{12}H_{20}O_3$

MW: 212 CAS#: 70372-90-6 NIST#: 196753 ID#: 125443 DB: mainlib

Other DBs: None

Contributor: Chemical Concepts

10 largest peaks:

169 999 | 43 730 | 127 709 | 81 481 | 67 370 | 79 355 | 41 307 | 109 229 | 53 203 | 55 174 |

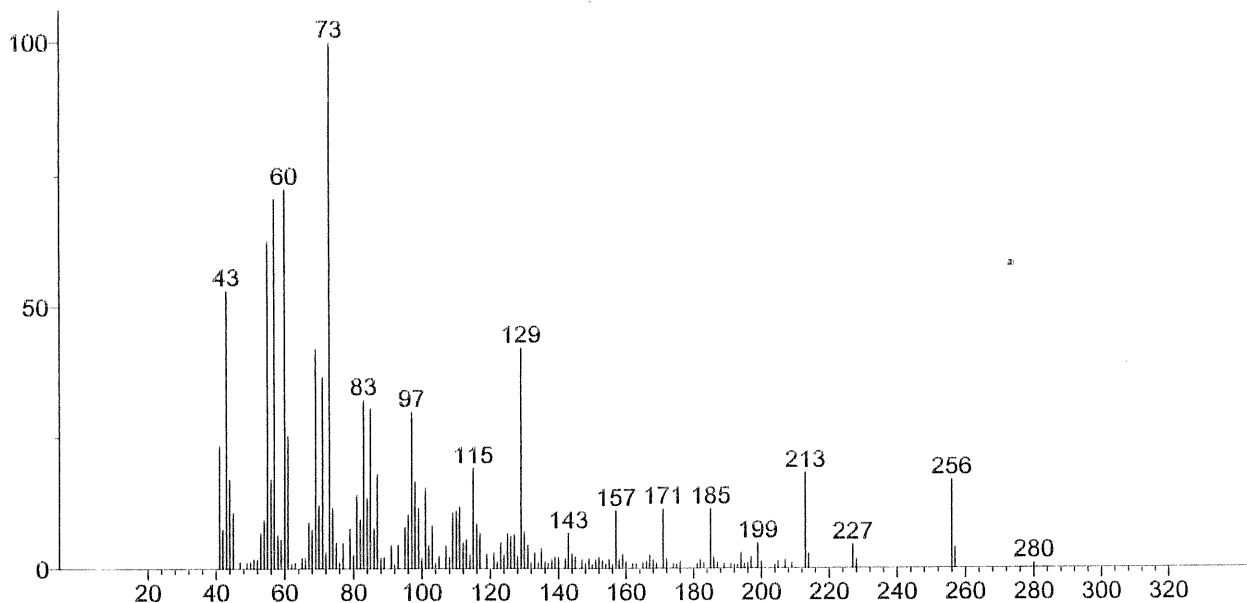
Synonyms:

1.4-Hydroxy-4-isopropyl-5-methyl-2-hexynyl acetate #

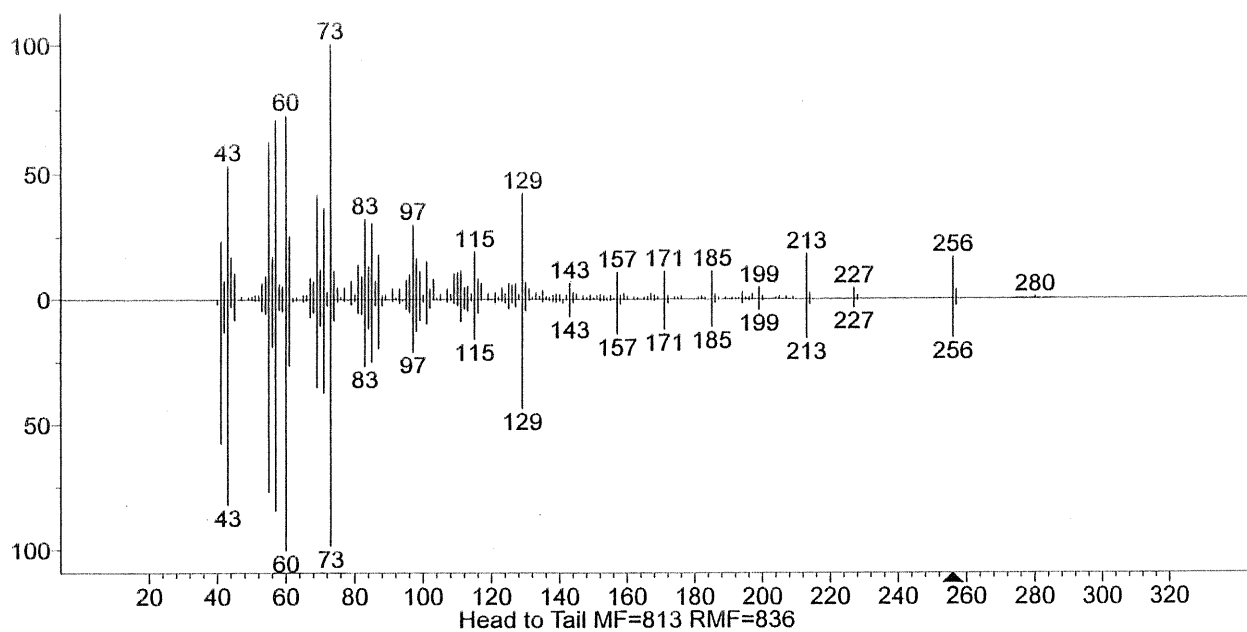
Estimated non-polar retention index (n-alkane scale):

Value: 1362 iu

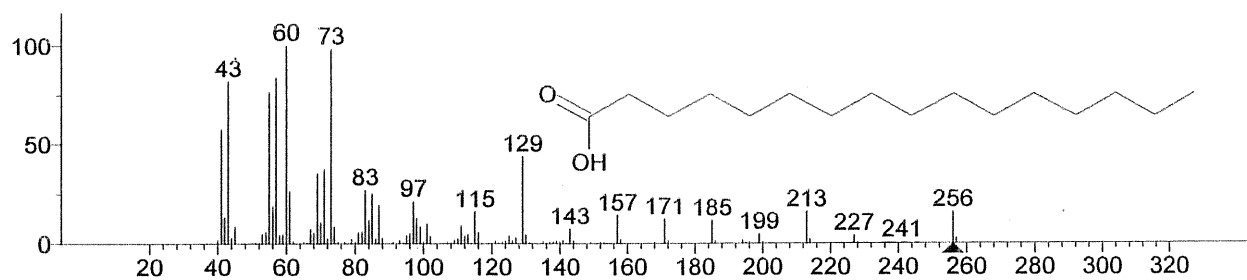
Confidence interval (Diverse functional groups): 89(50%) 382(95%) iu



(Text File) +EI Scan (47.657 min) ALI-DRAG-H4-220421-.D



Head to Tail MF=813 RMF=836



(replib) n-Hexadecanoic acid

Name: n-Hexadecanoic acid

Formula: $C_{16}H_{32}O_2$

MW: 256 CAS#: 57-10-3 NIST#: 335494 ID#: 6723 DB: replib

Other DBs: Fine, TSCA, RTECS, EPA, HODOC, NIH, EINECS, IRDB

Contributor: Drug Lab

10 largest peaks:

60 999 | 73 980 | 57 840 | 43 817 | 55 767 | 41 574 | 129 435 | 71 373 | 69 351 | 83 267 |

Synonyms:

- 1.Hexadecanoic acid
- 2.n-Hexadecoic acid
- 3.Palmitic acid
- 4.Pentadecanecarboxylic acid
- 5.1-Pentadecanecarboxylic acid
- 6.Cetylic acid
- 7.Emersol 140
- 8.Emersol 143
- 9.Hexadecylic acid
- 10.Hydrofol
- 11.Hystrene 8016
- 12.Hystrene 9016
- 13.Industrene 4516
- 14.Prifrac 2960
- 15.Glycon P-45
- 16.Prifac 2960
- 17.Univol U332

Estimated non-polar retention index (n-alkane scale):

Value: 1968 iu

Confidence interval (Carboxylic acids): 51(50%) 220(95%) iu

Retention index.

1. Value: 1942 iu

Column Type: Capillary

Column Class: Standard non-polar

Active Phase: RTX-1

Column

Length: 60 m

Carrier Gas: He

Column Diameter: 0.22 mm

Phase Thickness: 0.25 μ m

Data Type: Linear

RI

Program Type: Ramp

Start T: 60 C

End T: 230 C

Heat Rate: 2 K/min

End Time: 35 min

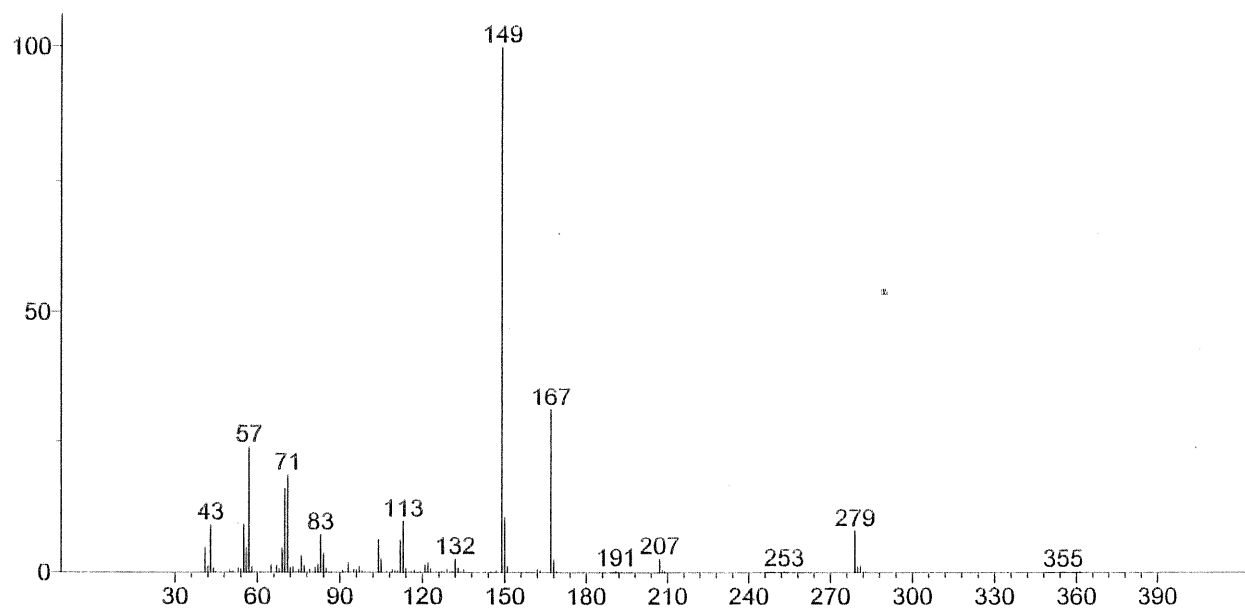
Source: Paolini, J.;

Muselli, A.; Bernardini, A.-F.; Bighelli, A.; Casanova, J.; Costa, J., Thymol derivatives from essential oil of *Doronicum corsicum* L., *Flavour Fragr. J.*, 22, 2007, 479-487.

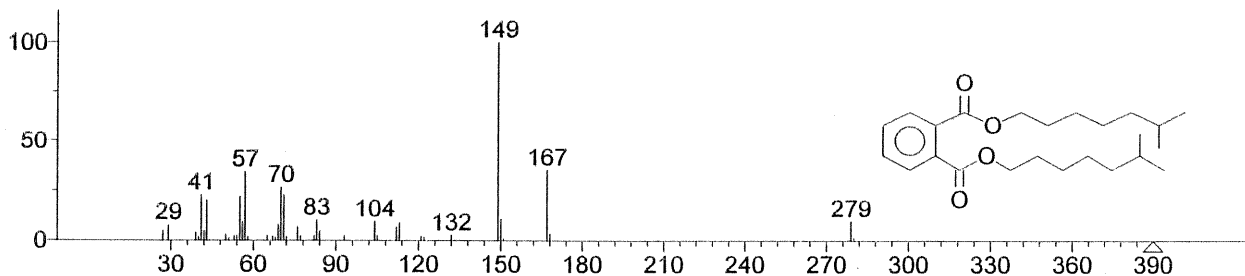
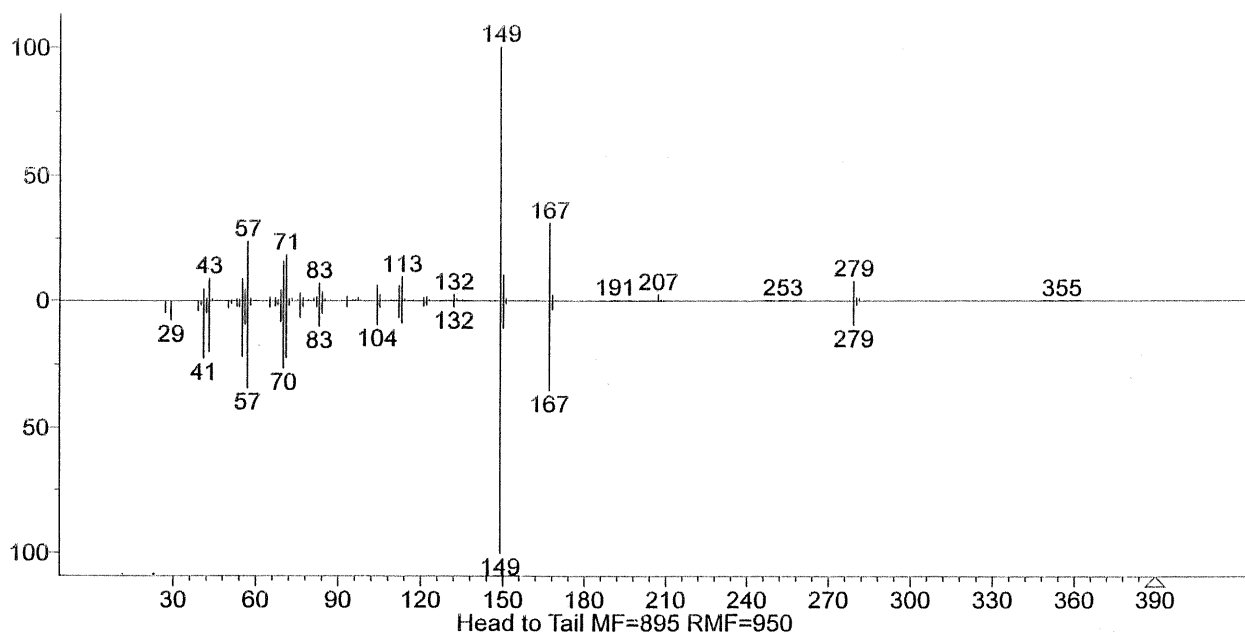
2. Value: 1972 iu

Column Type: Capillary

Column



(Text File) +EI Scan (76.665 min) ALI-DRAG-H4-220421-.D



(replib) 1,2-Benzenedicarboxylic acid, diisooctyl ester

Name: 1,2-Benzenedicarboxylic acid, diisooctyl ester

Formula: C₂₄H₃₈O₄

MW: 390 CAS#: 27554-26-3 NIST#: 113206 ID#: 20061 DB: replib

Other DBs: Fine, TSCA, RTECS, EINECS, IRDB

Contributor: NIST Mass Spectrometry Data Center, 1990.

10 largest peaks:

149 999 | 167 350 | 57 341 | 70 264 | 41 225 | 71 224 | 55 218 | 43 200 | 150 107 | 83 100 |

Synonyms:

1. Diisooctyl phthalate
2. Hexaplas M/O
3. Isooctyl phthalate
4. Corflex 880
5. DIOP
6. Flexol plasticizer diop
7. Morflex 100
8. Palatinol D10
9. Phthalic acid, bis(6-methylheptyl) ester
10. Phthalic acid, diisooctyl ester
11. Witcizer 313
12. Bis(6-methylheptyl) phthalate #

Estimated non-polar retention index (n-alkane scale):

Value: 2704 iu

Confidence interval (Esters): 47(50%) 201(95%) iu