Electronic Supplementary Material (ESI) for RSC Advances

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General Information

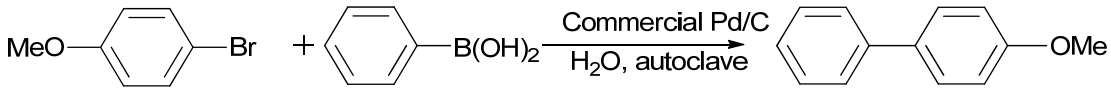
All Reactions were performed in autoclave under hydrothermal or solvothermal conditions. The Reagents used for experiments were purchased from Sinopharm Chemical Reagent, Sigma-Aldrich and Alfa Aesar and used as received unless otherwise noted. Ethyl acetate and petroleum ether used as eluent were dried by $MgSO_4$ and distilled before used. ^1H and ^{13}C NMR spectra were recorded at 300, 75 MHz, respectively. Proton and carbon magnetic resonance spectra (^1H NMR and ^{13}C NMR) were recorded using tetramethylsilane (TMS) in the solvent of $CDCl_3$ as the internal standard (^1H NMR: TMS at 0.00 ppm, $CHCl_3$ at 7.26 ppm; ^{13}C NMR: $CDCl_3$ at 77.0 ppm). The yields reported were isolated yields and average of two runs.

Experimental Section

General procedure for coupling reactions: Aryl halide (0.5 mmol), phenylboronic acid (0.75 mmol), K_2CO_3 (1.5 mmol), TBAB (0.12 mmol), commercial Pd/C (0.6 mol%) were added to 2 mL deionized water. The reaction mixture was transferred to an autoclave and heated at 130 ^oC for 2h or 4h. The solution was extracted with suitable solvent, such as ethyl acetate, chloroform (3×5 ml) and concentrated by rotary evaporator. The residue was purified by column chromatography on silica gel to provide the desired product.

General procedure for amination reactions: aryl halide (0.5 mmol), $NH_3 \cdot H_2O$ (3.0 mmol), and CuI (5 mol%) were added to 2 mL deionized water. The reaction mixture was transferred to an autoclave and heated at 200 ^oC for 2h. The solution was extracted with suitable solvent, such as ethyl acetate, chloroform (3×5 ml) and concentrated by rotary evaporator. The residue was purified by column chromatography on silica gel to provide the desired product.

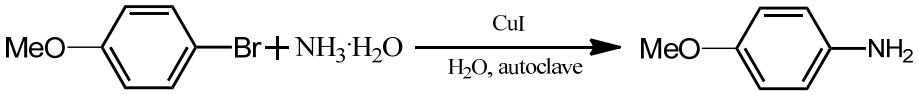
Table S1 Catalytic experiment of recycled Commercial Pd/C for Suzuki-Miyaura Coupling[a]



Recycle times	1	2	3
Yield[%][b]	95	94	76

[a] Reaction condition: 4-bromoanisole (0.5 mmol), phenylboronic acid (0.75 mmol), K_2CO_3 (1.5 mmol), TBAB (0.12 mmol), water (2 mL), and commercial Pd/C (0.6mol%), 130 ^oC, 2h, hydrothermal treatment. [b] Yields were determined by GC.

Table S2: Amination of 4-bromoanisole: optimization of the reaction conditions. [a]

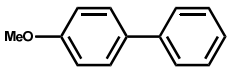


Entry	TBAB/mg	Base	Temperature/ °C	Yield[%][b]
1	0	/	200	91
2	40	/	200	90
3	/	K_2CO_3	200	90
4	/	/	150	46
5	/	/	100	<5

[a] Reaction condition: 4-bromoanisole (0.5 mmol), $NH_3 \cdot H_2O$ (3.0 mmol), water (2 mL), base (1.5 mmol), and CuI (5 mol%), 2h, hydrothermal treatment. [b] Yields were determined by GC.

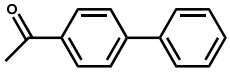
4-Methoxybiphenyl

Eluent: petroleum ether/ethyl acetate 30:1, white solid. ^{1}H NMR (300 MHz, $CDCl_3$) δ: 7.54-7.58 (m, 4H), 7.41-7.45 (m, 2H), 7.32 (t, J=8.2 Hz, 1H), 7.00 (d, J=9.1 Hz, 2H), 3.87 (s, 3H); ^{13}C NMR ($CDCl_3$, 75 MHz) δ: 159.3, 140.9, 133.9, 128.8, 128.3, 126.8, 126.7, 114.3, 55.4.



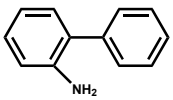
4-Acetylbiphenyl

Eluent: petroleum ether/ethyl acetate 20:1, white solid. ^{1}H NMR (300 MHz, $CDCl_3$) δ: 8.04 (d, 2H), 7.68 (d, J=8.1Hz, 2H), 7.62 (d, J=8.1 Hz, 2H), 7.45-7.49 (m, 3H), 2.67 (s, 3H); ^{13}C NMR ($CDCl_3$, 75 MHz) δ: 145.9, 140.0, 136.0, 129.1, 129.05, 129.01, 128.3, 127.4, 127.3, 26.8.



2-Aminodiphenyl

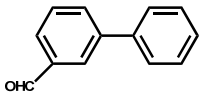
Eluent: petroleum ether/ethyl acetate 1:0, light purple solid. ^{1}H NMR (300 MHz, $CDCl_3$) δ: 7.50-7.52 (m, 3H), 7.39-7.43 (m, 2H), 7.21 (d, J=7.6Hz, 2H), 6.88 (t, 1H), 6.81 (d, 1H), 3.7 (br, 2H); ^{13}C NMR ($CDCl_3$, 75 MHz) δ: 143.6, 139.7, 130.6, 129.3, 129.0, 128.6, 127.8, 127.3, 118.8, 115.8.



3-Phenylbenzaldehyde

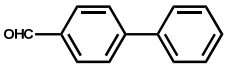
Eluent: petroleum ether/ethyl acetate 30:1, colorless liquid. ^{1}H NMR (300 MHz, $CDCl_3$) δ: 10.10 (s, 1H), 8.10 (s, 1H), 7.86 (d, J=7.7 Hz, 2H), 7.61-7.64 (m, 3H), 7.46-7.48 (m, 3H); ^{13}C NMR ($CDCl_3$, 75 MHz) δ: 192.4, 142.3, 139.8, 137.0, 133.2,

129.6, 129.0, 128.7, 128.3, 128.1, 127.2.



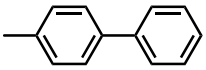
4-Phenylbenzaldehyde

Eluent: petroleum ether/ethyl acetate 20:1, colorless liquid. ^{1}H NMR (300 MHz, $CDCl_3$) δ: 10.06 (s, 1H), 7.96 (d, J=7.0 Hz, 2H), 7.76 (d, J=7.0 Hz, 2H), 7.64 (d, J=7.1Hz, 2H), 7.46-7.50 (m, 3H); ^{13}C NMR ($CDCl_3$, 75 MHz) δ: 192.0, 130.4, 129.1, 127.8, 127.5.



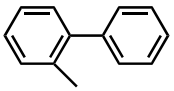
4-Methybiphenyl

Eluent: petroleum ether/ethyl acetate 1:0, white solid. ^{1}H NMR (300 MHz, $CDCl_3$) δ: 7.59 (d, 2H), 7.50 (d, J=7.9Hz, 2H), 7.44 (q, J=7.6 Hz, 2H), 7.34 (t, 1H), 7.25 (d, J=7.9Hz, 2H), 2.41 (s, 3H); ^{13}C NMR ($CDCl_3$, 75 MHz) δ: 141.3, 138.5, 137.1, 129.6, 128.8, 127.1, 21.2.



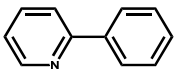
2-Methybiphenyl

Eluent: petroleum ether/ethyl acetate 1:0, colorless liquid. ^{1}H NMR (300 MHz, $CDCl_3$) δ: 7.43 (m, 2H), 7.38 (m, 2H), 7.31-7.35 (m, 5H), 2.36 (s, 3H); ^{13}C NMR ($CDCl_3$, 75 MHz) δ: 142.1, 135.5, 130.5, 130.0, 129.4, 128.2, 127.4, 126.9, 125.9, 20.6.



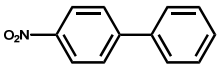
2-Phenylpyridine

Eluent: petroleum ether/ethyl acetate 15:1, light yellow oil. ^{1}H NMR (300 MHz, $CDCl_3$) δ: 8.70 (d,J=4.8Hz, 1H), 8.01 (d, J=6.9Hz, 2H), 7.73 (m, 2H), 7.41-7.47 (m, 3H), 7.23 (m, 1H); ^{13}C NMR ($CDCl_3$, 75 MHz) δ: 157.6, 149.8, 139.5, 136.8, 129.0, 128.8, 127.0, 122.2, 120.7.



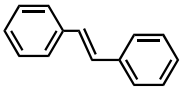
4-Nitrobiphenyl

Eluent: petroleum ether/ethyl acetate 50:1, yellow solid. ^{1}H NMR (300 MHz, $CDCl_3$) δ: 8.29 (d, J=8.6 Hz, 2H), 7.74 (d, J=8.9 Hz, 2H), 7.62 (d, J=8.5 Hz, 2H), 7.44-7.52 (m, 3H); ^{13}C NMR ($CDCl_3$, 75 MHz) δ: 129.2, 127.9, 127.5, 124.2.



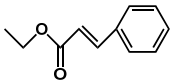
trans-Stilbene

Eluent: petroleum ether/ethyl acetate 1:0, colorless solid. ^{1}H NMR (300 MHz, $CDCl_3$) δ: 7.54 (d, J=7.9 Hz, 2H), 7.36-7.41 (m, 4H), 7.28 (t, J=7.0 Hz, 2H), 7.14 (s, 2H); ^{13}C NMR ($CDCl_3$, 75 MHz) δ: 137.4, 128.8, 127.7, 126.6.



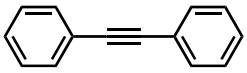
Ethyl cinnamate

Eluent: petroleum ether/ethyl acetate/dichloromethane 50:1:1, colorless oil. ^{1}H NMR (300 MHz, $CDCl_3$) δ: 7.69 (d, J=16.1 Hz, 1H), 7.52 (m, 2H), 7.37 (m, 3H), 6.46 (d, J=16.1 Hz, 1H), 4.26 (q, J=7.2 Hz, 2H), 1.34 (t, J=7.2 Hz, 3H); ^{13}C NMR ($CDCl_3$, 75 MHz) δ: 167.1, 144.7, 134.6, 130.3, 129.0, 128.1, 118.4, 60.6, 14.4.



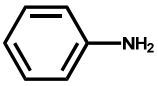
Diphenylacetylene

Eluent: petroleum ether/ethyl acetate 1:0, colorless solid. ^{1}H NMR (300 MHz, $CDCl_3$) δ: 7.55-7.62 (m, 4H), 7.34-7.38 (m, 6H); ^{13}C NMR ($CDCl_3$, 75 MHz) δ: 131.7, 128.5, 128.4, 123.4, 89.5.



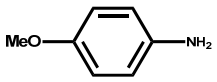
Aniline

Eluent: petroleum ether/ethyl acetate 1:1, light yellow oil. ^{1}H NMR (300 MHz, $CDCl_3$) δ: 7.31 (q, J=7.5 Hz, 2H), 6.93 (t, J=7.5 Hz, 1H), 6.78 (t, J=7.5Hz, 2H), 3.70 (s, 2H); ^{13}C NMR ($CDCl_3$, 75 MHz) δ: 146.9, 129.6, 118.7, 115.4.



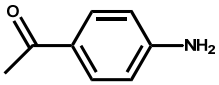
4-Methoxybenzenamine

Eluent: petroleum ether/ethyl acetate 5:1, light yellow solid. ^{1}H NMR (300 MHz, $CDCl_3$) δ: 6.75 (d, J=8.5 Hz, 2H), 6.64 (d, J=8.5 Hz, 2H), 3.73 (s, 3H), 3.36 (s, 2H); ^{13}C NMR ($CDCl_3$, 75 MHz) δ: 152.9, 140.1, 116.5, 114.9, 55.8.



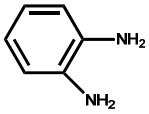
4-aminoacetophenone

Eluent: petroleum ether/ethyl acetate 5:1, yellow solid. ^{1}H NMR (300 MHz, $CDCl_3$) δ: 7.82 (d, J=8.6 Hz, 2H), 6.63 (d, J=8.6 Hz, 2H), 4.14 (br, 2H), 2.50 (s, 3H); ^{13}C NMR ($CDCl_3$, 75 MHz) δ: 196.5, 151.2, 130.9, 128.0, 113.8, 26.1.



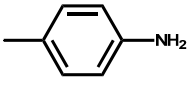
1,2-Diaminobenzene

Eluent: petroleum ether/ethyl acetate 1:1, light yellow solid. ^{1}H NMR (300 MHz, $CDCl_3$) δ: 6.71 (m, 4H), 3.17 (br, 4H); ^{13}C NMR ($CDCl_3$, 75 MHz) δ: 134.8, 120.4, 116.8.



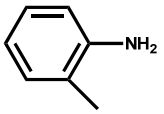
4-Methylaniline

Eluent: petroleum ether/ethyl acetate 10:1, light yellow solid. ^{1}H NMR (300 MHz, $CDCl_3$) δ: 7.01 (d, J=7.6 Hz, 2H), 6.65 (d, J=7.6 Hz, 2H), 3.44 (br, 2H), 2.29 (s, 3H); ^{13}C NMR ($CDCl_3$, 75 MHz) δ: 144.0, 129.9, 127.9, 115.4, 20.6.



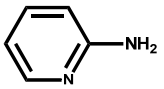
2-Methylaniline

Eluent: petroleum ether/ethyl acetate 8:1, light yellow oil. ^{1}H NMR (300 MHz, $CDCl_3$) δ: 7.10 (m, 2H), 6.70-6.78 (m, 2H), 3.54 (br, 2H), 2.22 (s, 3H); ^{13}C NMR ($CDCl_3$, 75 MHz) δ: 144.7, 130.6, 127.1, 122.4, 118.7, 115.1, 17.5.



2-aminopyridine

Eluent: petroleum ether/ethyl acetate 1:1, colorless solid. ^{1}H NMR (300 MHz, $CDCl_3$) δ: 8.06 (d, J=4.1 Hz, 1H), 7.42 (m, 1H), 6.63 (m, 1H), 6.48 (d, J=7.2 Hz, 1H); ^{13}C NMR ($CDCl_3$, 75 MHz) δ: 148.2, 137.9, 114.1, 108.7.

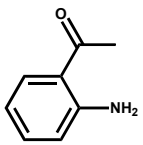


4-Nitroaniline

Eluent: petroleum ether/ethyl acetate 1:1, yellow solid. ^{1}H NMR (300 MHz, $CDCl_3$) δ: 8.06 (d, J=8.6 Hz, 2H), 6.62 (d, J=8.6 Hz, 2H), 4.35 (br, 2H); ^{13}C NMR ($CDCl_3$, 75 MHz) δ: 126.4, 113.5.

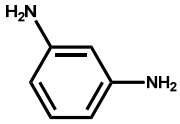
2-Aminoacetophenone

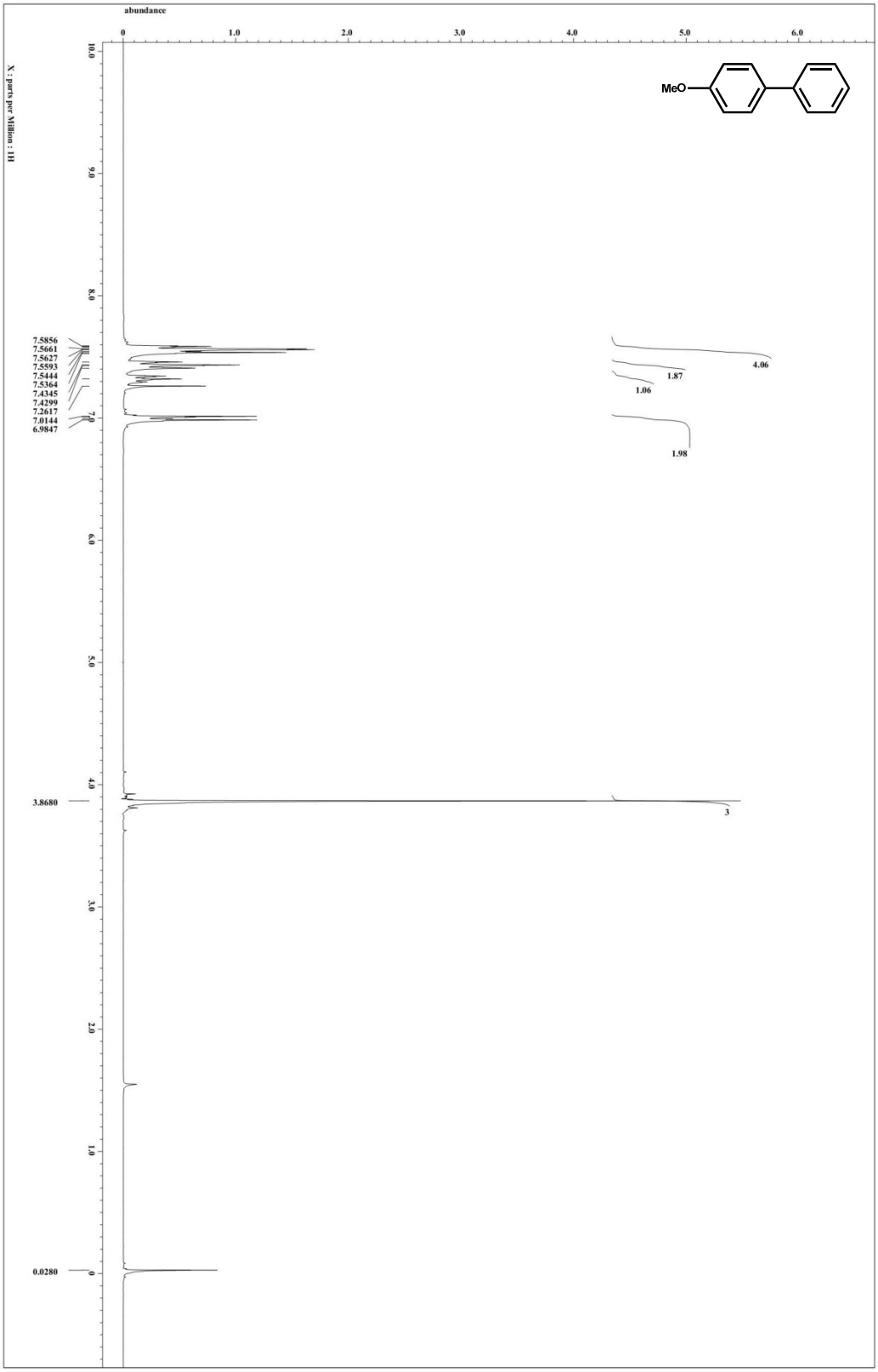
Eluent: petroleum ether/ethyl acetate 8:1, yellow oil. ^{1}H NMR (300 MHz, $CDCl_3$) δ: 7.71 (t, J=7.2 Hz, 1H), 7.26 (q, 1H), 6.62-6.66 (m, 2H), 6.29 (br, 2H), 2.57 (d, 3H); ^{13}C NMR ($CDCl_3$, 75 MHz) δ: 200.9, 150.4, 134.5, 132.1, 118.3, 117.3, 115.8, 27.9.

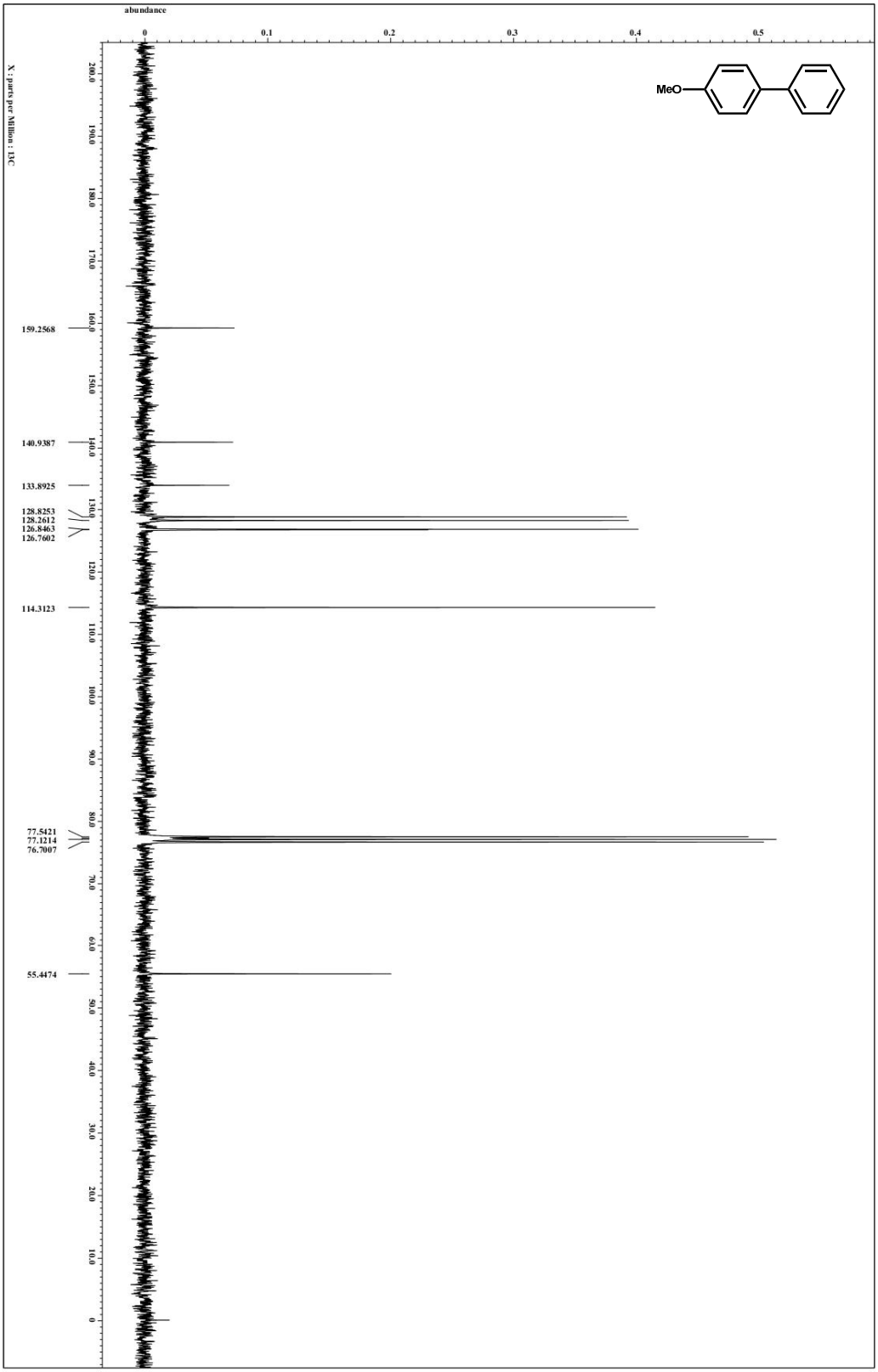


1,3-Diaminobenzene

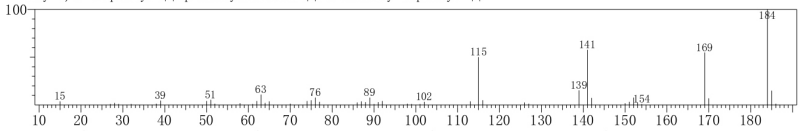
Eluent: petroleum ether/ethyl acetate 1:1, white solid. ^{1}H NMR (300 MHz, $CDCl_3$) δ: 6.94 (t, J=7.9 Hz, 1H), 6.11 (d, J=7.9 Hz, 2H), 6.12 (s, 1H), 3.49 (br, 4H); ^{13}C NMR ($CDCl_3$, 75 MHz) δ: 147.6, 130.3, 106.1, 102.0.



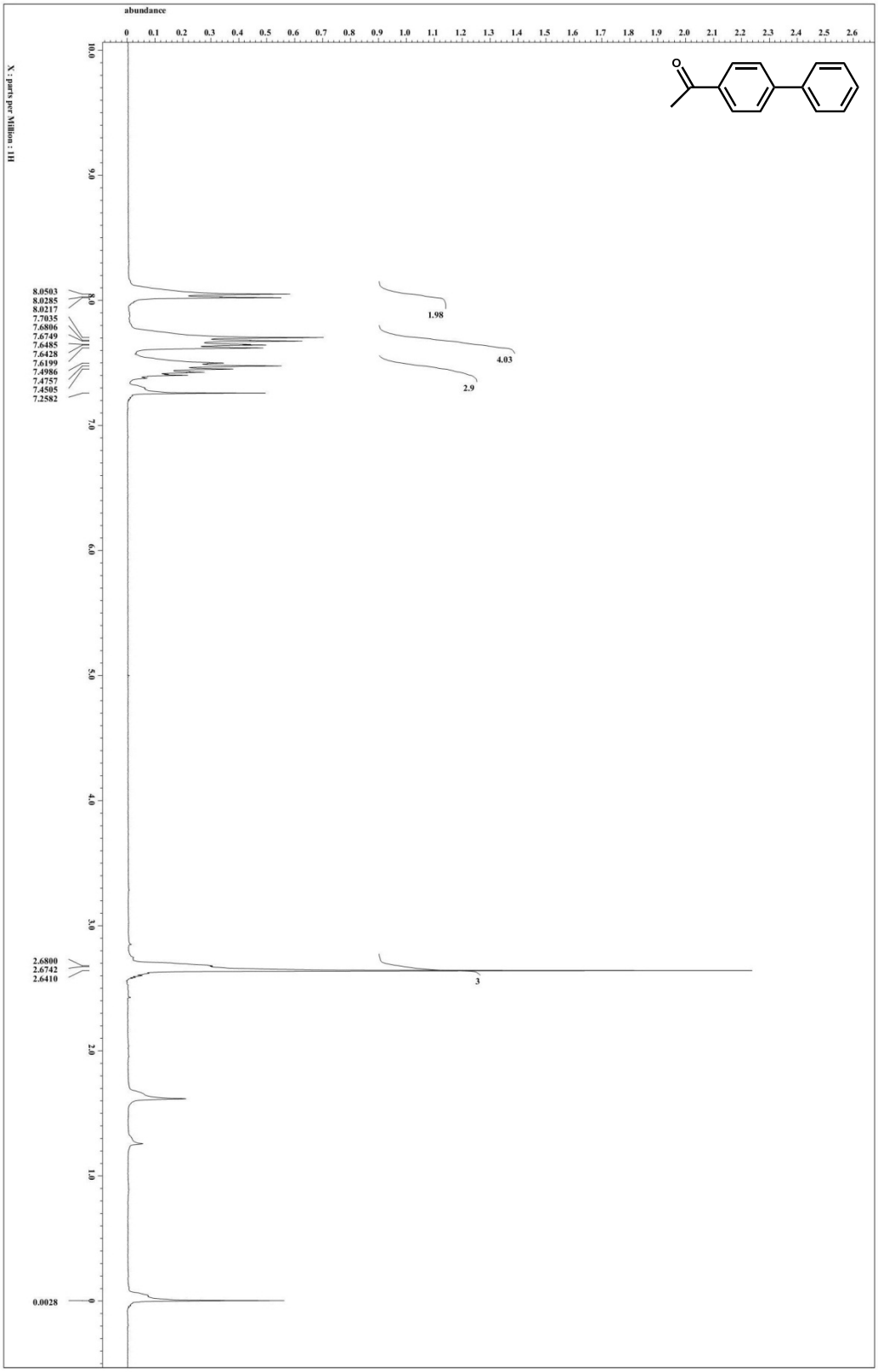


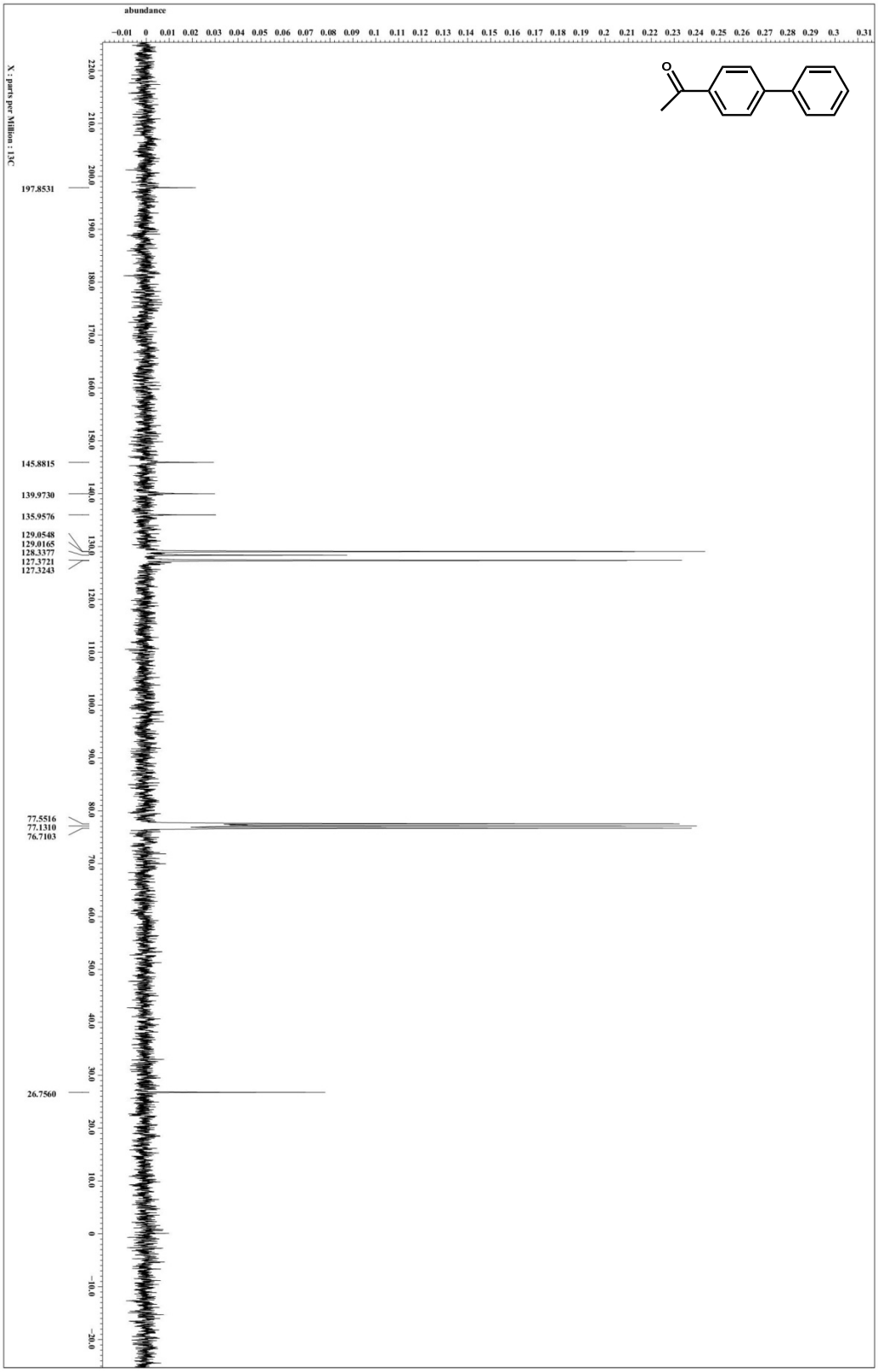


Formula: C13H12O CAS: 613-37-6 F.W. : 184
Component: 1,1'-Biphenyl, 4-methoxy- $$ Anisole, p-phenyl- $$ p-Methoxybiphenyl $$ 4-Methoxybiphenyl $$ 4-Methoxy-1,1'-biphenyl $$ p-Phenylanisole $$ 4-Methoxy-biphenyl $$



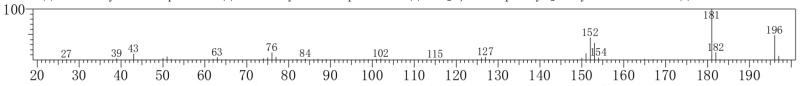
No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength
1	15.00	3.60	14	63.00	10.80	27	91.00	2.80	40	142.00	7.20
2	27.00	0.80	15	64.00	2.00	28	92.00	4.00	41	150.00	1.60
3	28.00	2.00	16	65.00	3.60	29	98.00	1.20	42	151.00	3.20
4	29.00	0.80	17	70.00	1.20	30	99.00	0.80	43	152.00	7.60
5	32.00	0.80	18	74.00	4.00	31	101.00	0.80	44	153.00	2.40
6	38.00	1.20	19	75.00	4.80	32	102.00	3.20	45	154.00	0.80
7	39.00	4.40	20	76.00	7.60	33	113.00	3.60	46	169.00	54.80
8	50.00	4.00	21	77.00	3.20	34	115.00	50.00	47	170.00	6.80
9	51.00	5.20	22	86.00	2.40	35	116.00	4.80	48	184.00	100.00
10	52.00	1.20	23	87.00	3.60	36	126.00	2.40	49	185.00	14.80
11	58.00	1.60	24	88.00	2.80	37	127.00	1.20	50	186.00	1.20
12	61.00	0.80	25	89.00	7.60	38	139.00	15.20			
13	62.00	4.00	26	90.00	0.80	39	141.00	57.60			



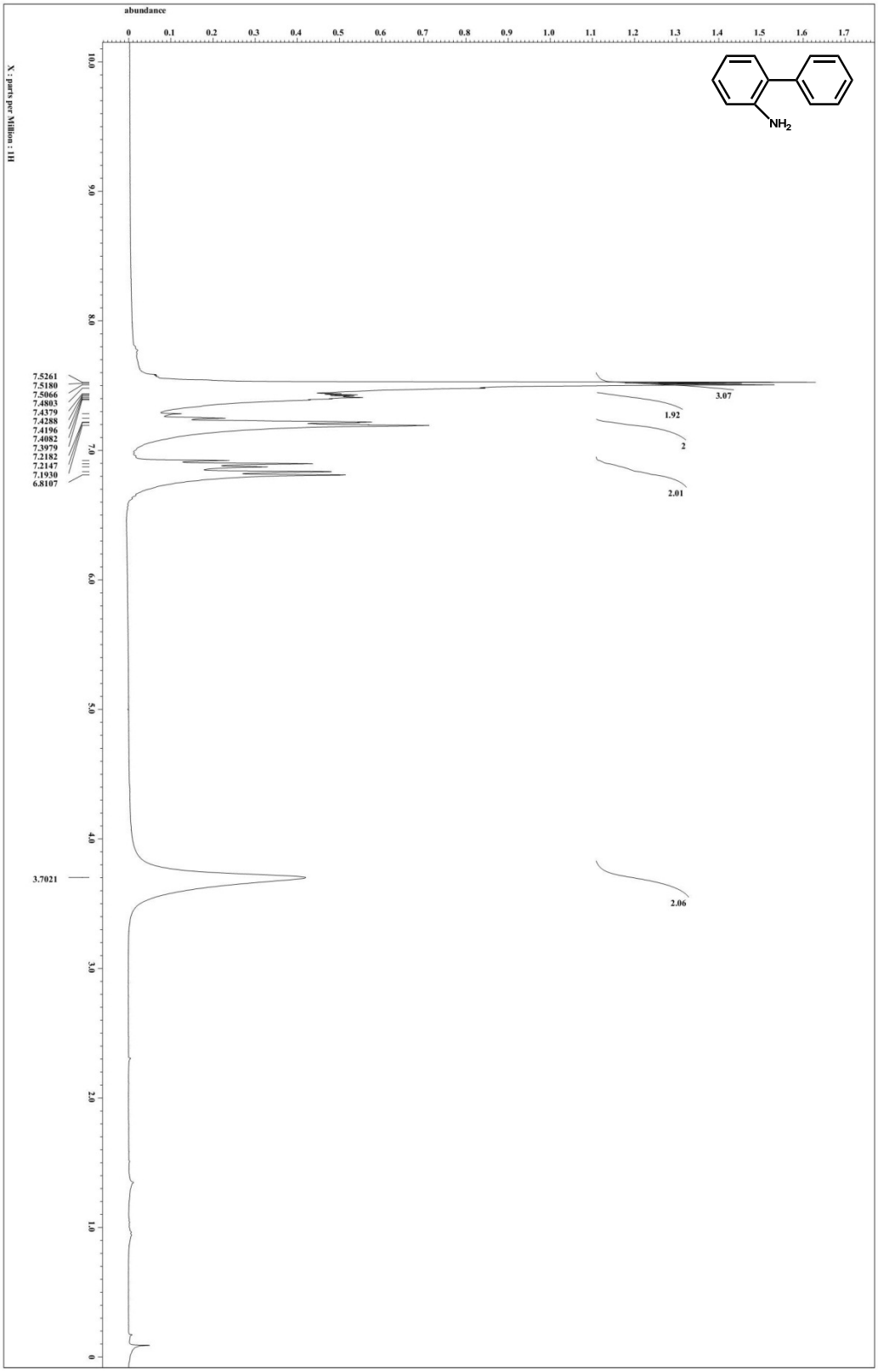


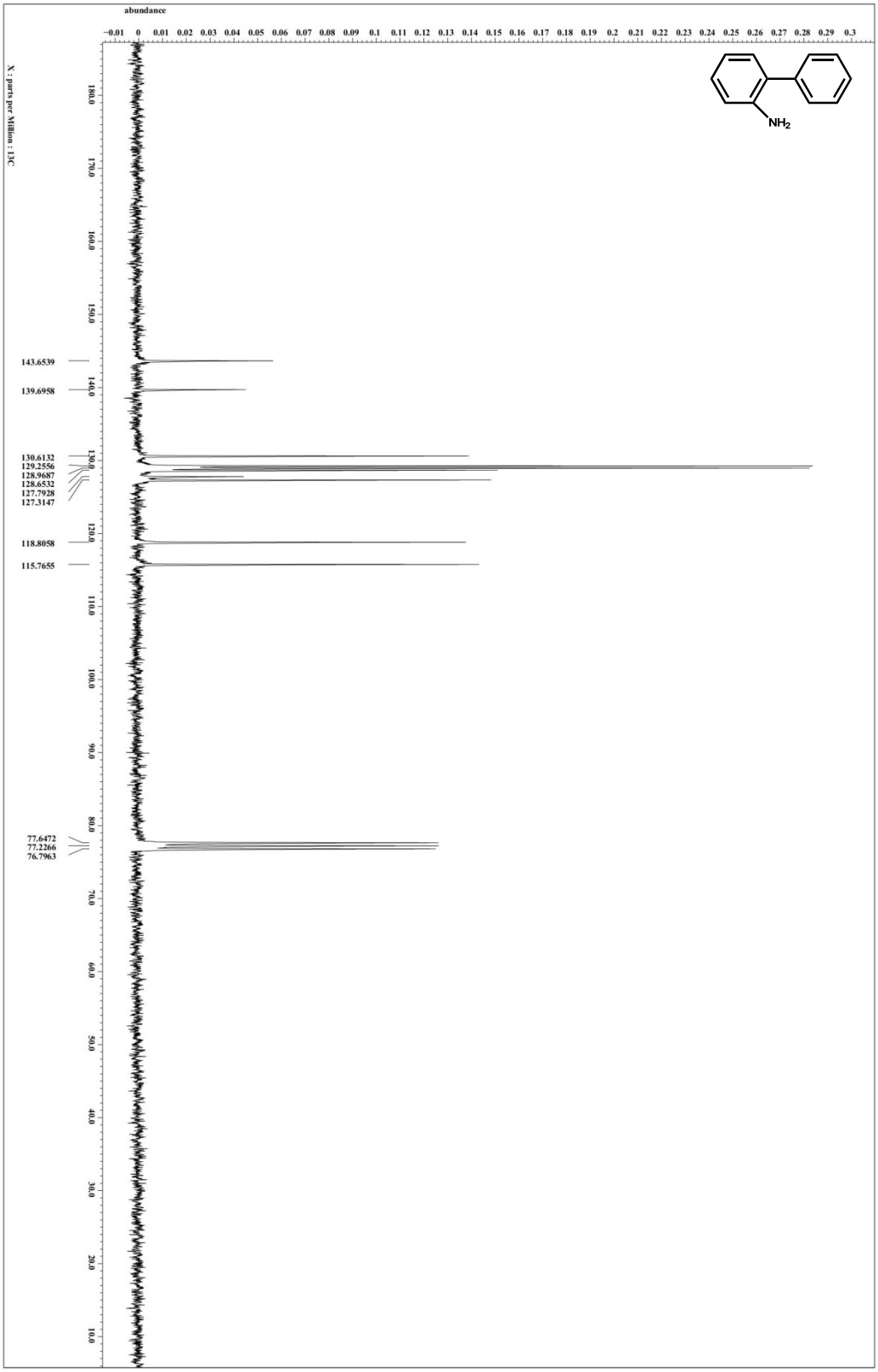
Formula: C14H12O CAS:92-91-1 **F.W.**: 196

Component: Ethanone, 1-[1,1'-biphenyl]-4-yl- $$ Acetophenone, 4'-phenyl- $$ p-Phenylacetophenone $$ Biphenyl-4-acetophenone $$ Ketone, 4-biphenylyl methyl $$ 4-Acetylbiphenyl $$ 4-Biphenylyl methyl ketone $$ 4-Phenylacetophenone $$ 4'-Phenylacetophenone $$ 4-Diphenyl methyl ketone $$ Acetodiphenyl $$ p-Biphenylyl methyl ketone $$ 4-Acetylbibenzyl $$ p-Acetylbiphenyl $$ Methyl 4-biphenylyl ketone $$ 1-Acetyl-4-phenylbenzene $$ 4-Phenyl-acetophenon $$ 4-Phenyl-acetophenone $$ 1-[1,1'-Biphenyl]-4-ylethanone # $$



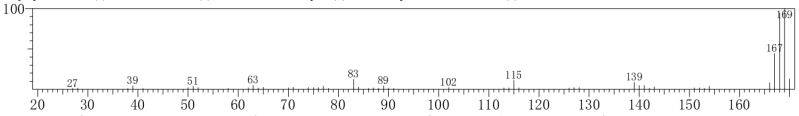
No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength
1	27.00	0.80	14	77.00	5.60	27	101.00	1.60	40	152.00	43.60
2	39.00	2.80	15	78.00	0.80	28	102.00	2.40	41	153.00	33.20
3	43.00	11.60	16	82.00	0.80	29	103.00	0.40	42	154.00	4.40
4	50.00	3.20	17	83.00	0.40	30	113.00	0.40	43	165.00	1.60
5	51.00	6.40	18	84.00	2.40	31	115.00	1.20	44	167.00	1.20
6	52.00	1.20	19	86.00	0.80	32	125.00	0.80	45	181.00	100.00
7	62.00	1.60	20	87.00	1.60	33	126.00	4.00	46	182.00	14.40
8	63.00	5.20	21	88.00	0.40	34	127.00	5.60	47	183.00	1.20
9	64.00	0.40	22	89.00	1.20	35	128.00	1.20	48	196.00	48.40
10	65.00	0.80	23	91.00	0.80	36	139.00	0.80	49	197.00	7.60
11	74.00	2.80	24	98.00	0.80	37	149.00	0.80	50	198.00	0.80
12	75.00	4.40	25	99.00	0.80	38	150.00	3.60			
13	76.00	14.80	26	100.00	0.40	39	151.00	12.80			



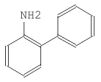


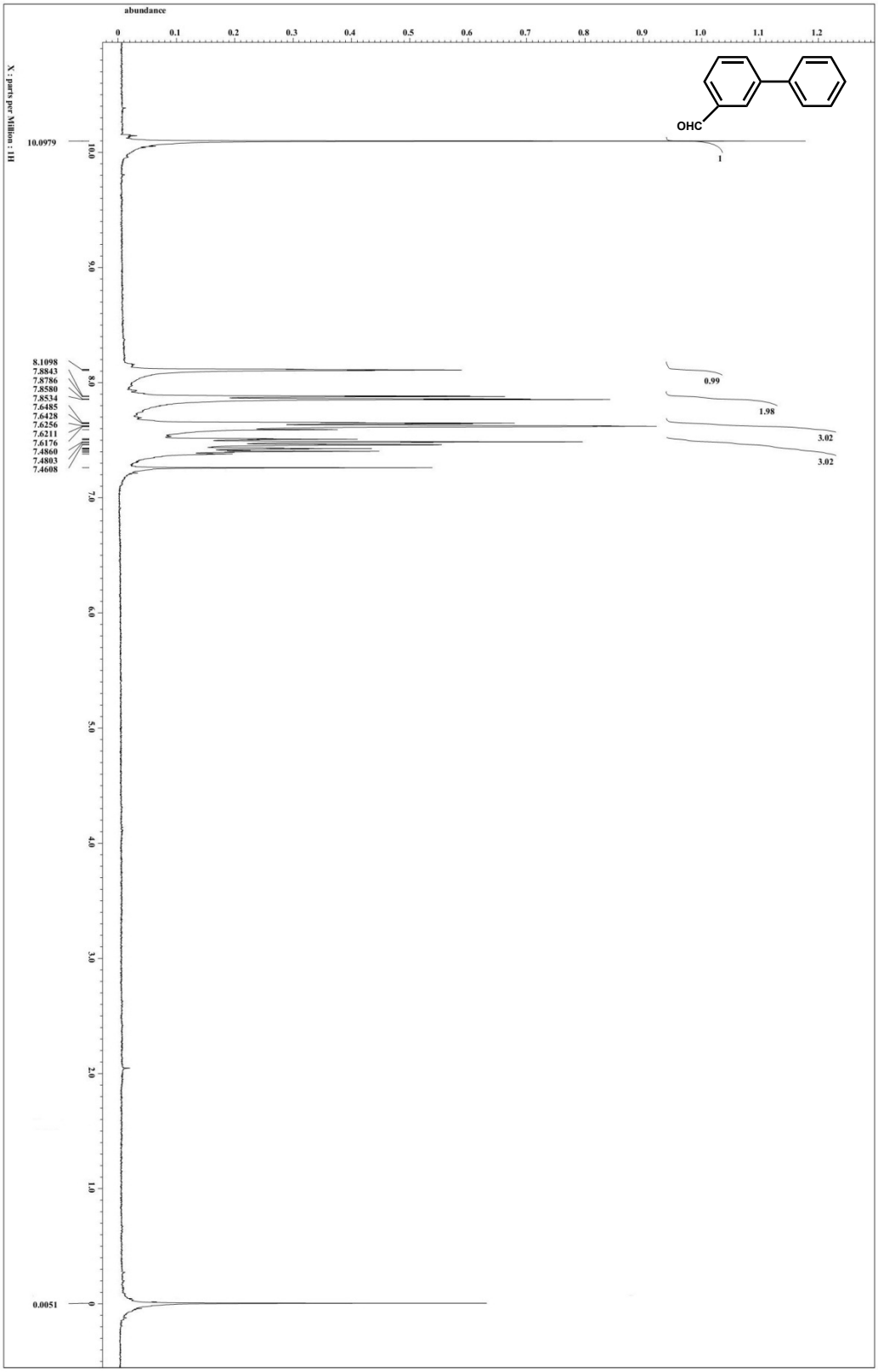
Formula : C12H11N CAS:90-41-5 **F.W.**: 169

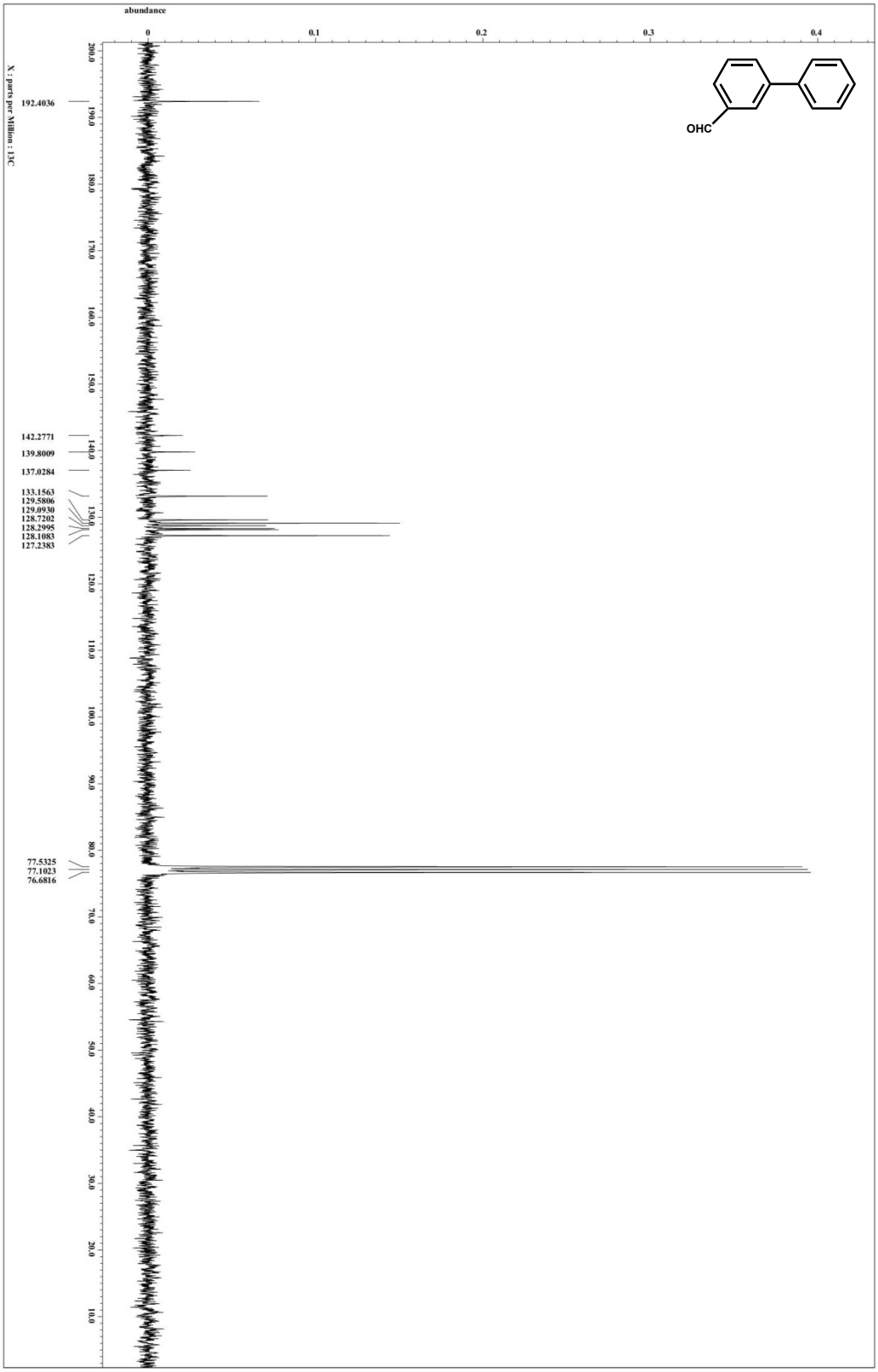
Component: [1,1'-Biphenyl]-2-amine $$ 2-Biphenylamine $$ o-Aminobiphenyl $$ o-Aminodiphenyl $$ o-Biphenylamine $$ o-Phenylaniline $$ 2-Aminobiphenyl $$ 2-Aminodiphenyl $$ 2-Phenylaniline $$ o-Xenylamine $$ 2-Biphenylylamine $$ NCI-C50282 $$ 2-Aminobifenyl $$ 2-Phenylbenzenamine $$



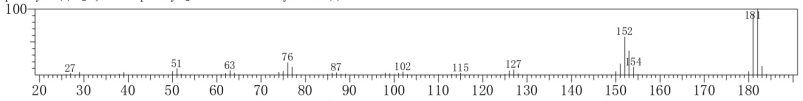
No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength
1	27.00	1.20	14	70.00	2.00	27	90.00	1.60	40	142.00	1.20
2	28.00	1.60	15	71.00	2.80	28	91.00	1.20	41	143.00	3.20
3	38.00	1.20	16	74.00	2.40	29	102.00	2.40	42	151.00	2.00
4	39.00	4.40	17	75.00	2.40	30	113.00	2.00	43	152.00	2.00
5	41.00	1.20	18	76.00	2.40	31	114.00	2.00	44	153.00	1.20
6	50.00	2.40	19	77.00	4.00	32	115.00	11.20	45	154.00	4.00
7	51.00	4.00	20	78.00	1.20	33	116.00	2.00	46	166.00	8.40
8	52.00	2.40	21	83.00	12.40	34	126.00	1.60	47	167.00	44.40
9	58.00	1.20	22	84.00	2.80	35	127.00	2.40	48	168.00	94.40
10	62.00	2.00	23	86.00	1.20	36	128.00	2.40	49	169.00	100.00
11	63.00	5.20	24	87.00	2.00	37	139.00	8.80	50	170.00	12.80
12	64.00	1.60	25	88.00	1.20	38	140.00	4.80			
13	65.00	2.80	26	89.00	4.40	39	141.00	4.80			



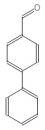




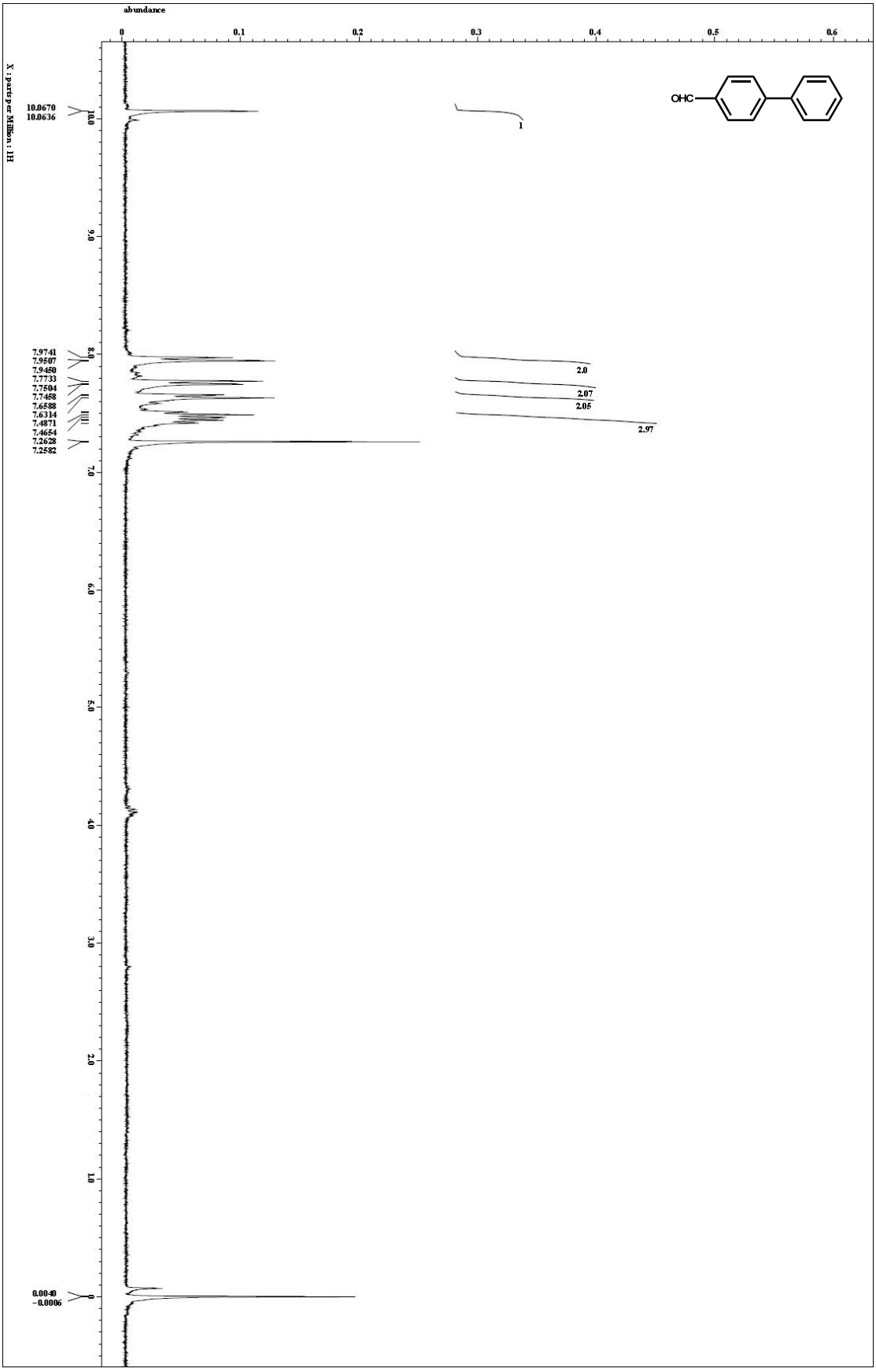
Formula : C13H10O CAS: 3218-36-8 F.W.: 182
Component: [1,1'-Biphenyl]-4-carboxaldehyde $$ 4-Biphenylcarboxaldehyde $$ p-Biphenylcarboxaldehyde $$ p-Biphenylylaldehyde $$ p-Phenylbenzaldehyde $$ Biphenyl-4-carboxaldehyde $$ 4-Biphenylaldehyde $$ 4-Biphenylcarboxaldehyde $$ 4-Phenylbenzaldehyde $$ 4-Biphenylcarboxyaldehyde $$ p-Biphenylaldehyde $$ 4-Formylbiphenyl $$ [1,1'-Biphenyl]-4-carbaldehyde # $$

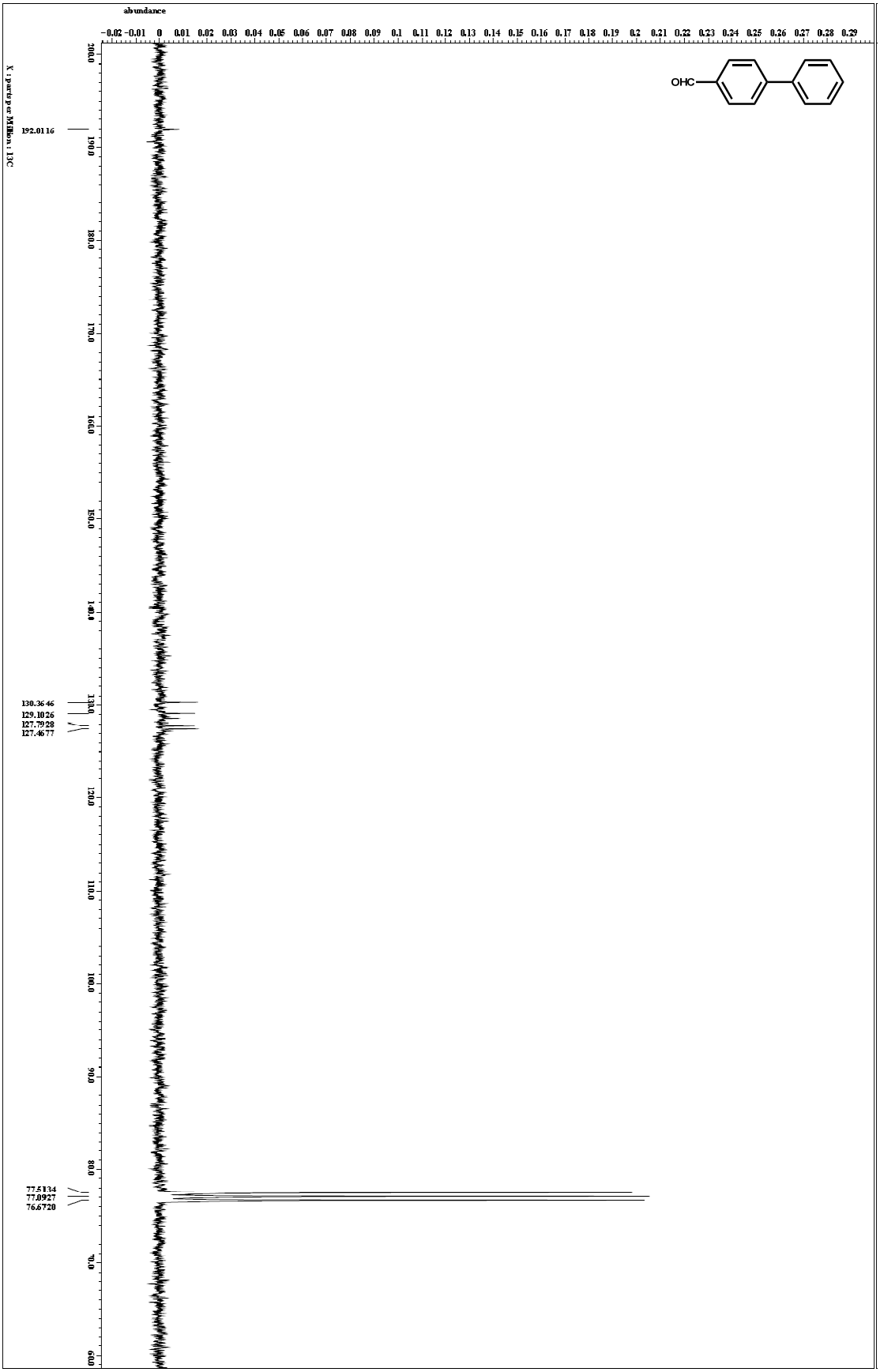


No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength
1	26.00	0.80	14	74.00	4.00	27	100.00	0.80	40	150.00	5.20
2	27.00	2.40	15	75.00	5.60	28	101.00	2.80	41	151.00	16.80
3	29.00	4.40	16	76.00	18.80	29	102.00	4.80	42	152.00	58.00
4	38.00	1.20	17	77.00	12.00	30	103.00	0.80	43	153.00	36.80
5	39.00	4.00	18	78.00	0.80	31	110.00	0.80	44	154.00	12.00
6	50.00	5.60	19	85.00	1.20	32	113.00	1.20	45	155.00	1.20
7	51.00	9.60	20	86.00	2.80	33	114.00	0.80	46	180.00	5.20
8	52.00	1.60	21	87.00	3.60	34	115.00	2.80	47	181.00	93.20
9	61.00	0.80	22	88.00	1.20	35	125.00	1.20	48	182.00	100.00
10	62.00	2.40	23	89.00	1.60	36	126.00	6.40	49	183.00	13.20
11	63.00	6.40	24	91.00	0.80	37	127.00	8.00	50	184.00	1.20
12	64.00	3.20	25	98.00	2.80	38	128.00	2.00			
13	65.00	0.80	26	99.00	2.00	39	139.00	0.80			

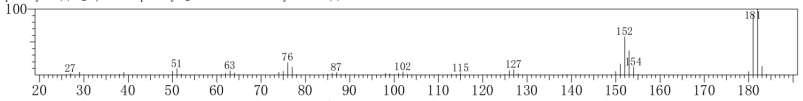


**The auto match of software put the aldehyde group to the wrong place.

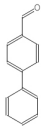


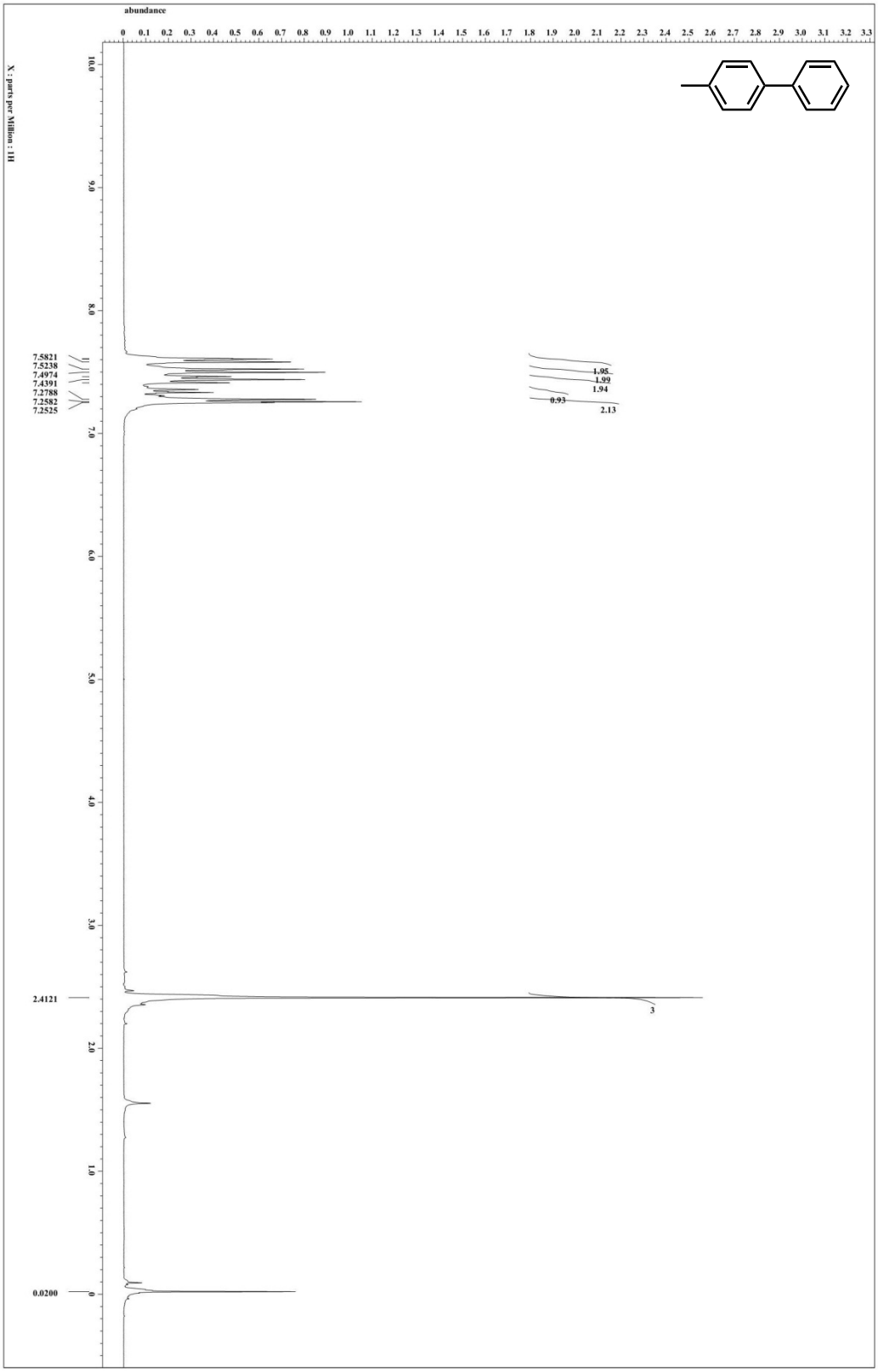


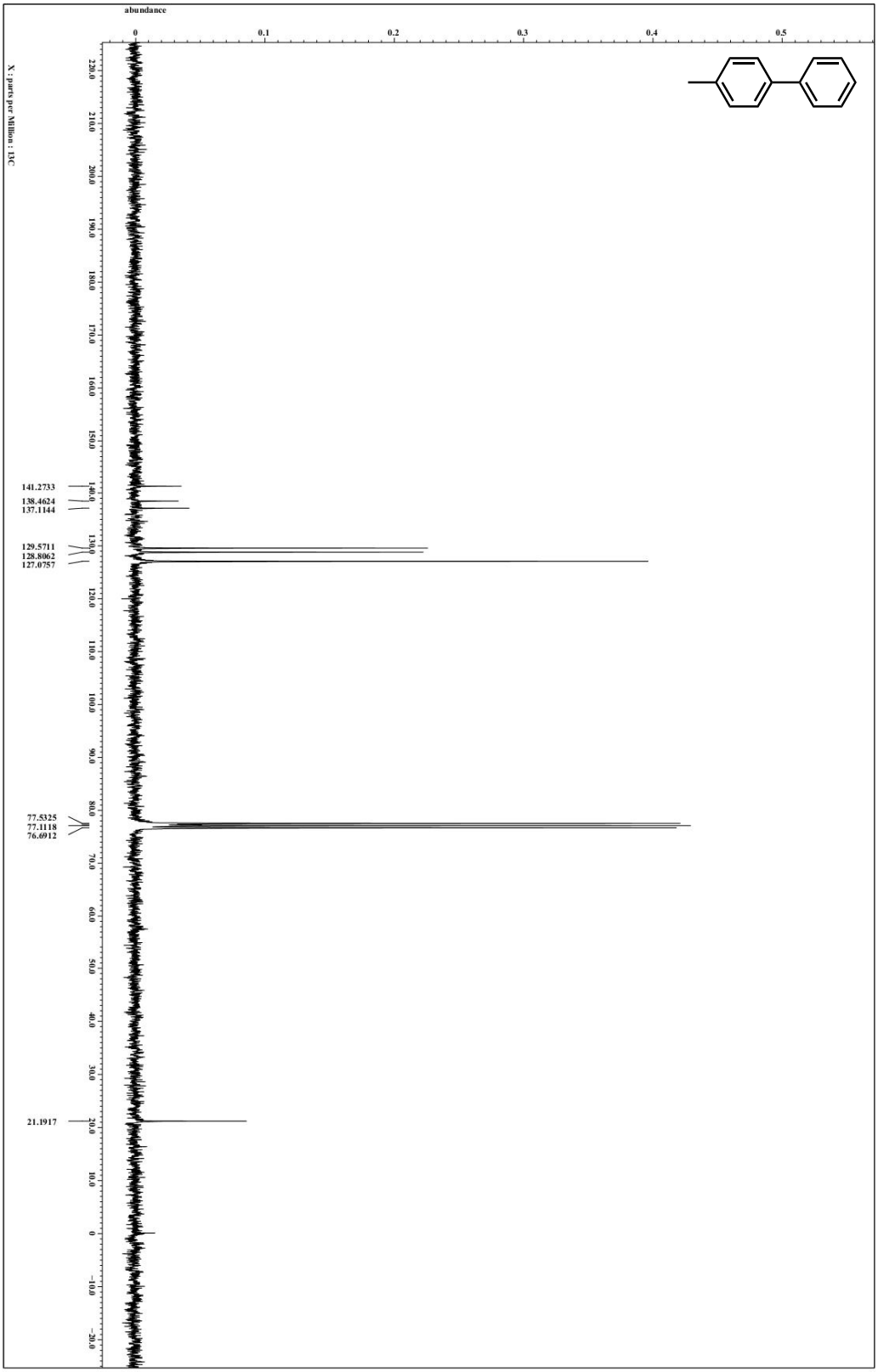
Formula: C13H10O CAS:3218-36-8 **F.W.**:182
Component: [1,1'-Biphenyl]-4-carboxaldehyde $$ 4-Biphenylcarboxaldehyde $$ p-Biphenylcarboxaldehyde $$ p-Biphenylylaldehyde $$ p-Phenylbenzaldehyde $$ Biphenyl-4-carboxaldehyde $$ 4-Biphenylaldehyde $$ 4-Biphenylcarboxaldehyde $$ 4-Phenylbenzaldehyde $$ 4-Biphenylcarboxyaldehyde $$ p-Biphenylaldehyde $$ 4-Formylbiphenyl $$ [1,1'-Biphenyl]-4-carbaldehyde # $$



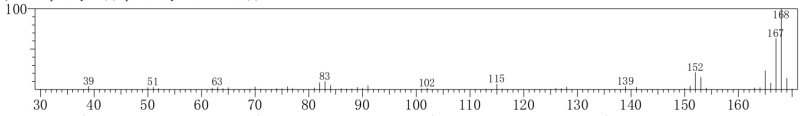
No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength
1	26.00	0.80	14	74.00	4.00	27	100.00	0.80	40	150.00	5.20
2	27.00	2.40	15	75.00	5.60	28	101.00	2.80	41	151.00	16.80
3	29.00	4.40	16	76.00	18.80	29	102.00	4.80	42	152.00	58.00
4	38.00	1.20	17	77.00	12.00	30	103.00	0.80	43	153.00	36.80
5	39.00	4.00	18	78.00	0.80	31	110.00	0.80	44	154.00	12.00
6	50.00	5.60	19	85.00	1.20	32	113.00	1.20	45	155.00	1.20
7	51.00	9.60	20	86.00	2.80	33	114.00	0.80	46	180.00	5.20
8	52.00	1.60	21	87.00	3.60	34	115.00	2.80	47	181.00	93.20
9	61.00	0.80	22	88.00	1.20	35	125.00	1.20	48	182.00	100.00
10	62.00	2.40	23	89.00	1.60	36	126.00	6.40	49	183.00	13.20
11	63.00	6.40	24	91.00	0.80	37	127.00	8.00	50	184.00	1.20
12	64.00	3.20	25	98.00	2.80	38	128.00	2.00			
13	65.00	0.80	26	99.00	2.00	39	139.00	0.80			



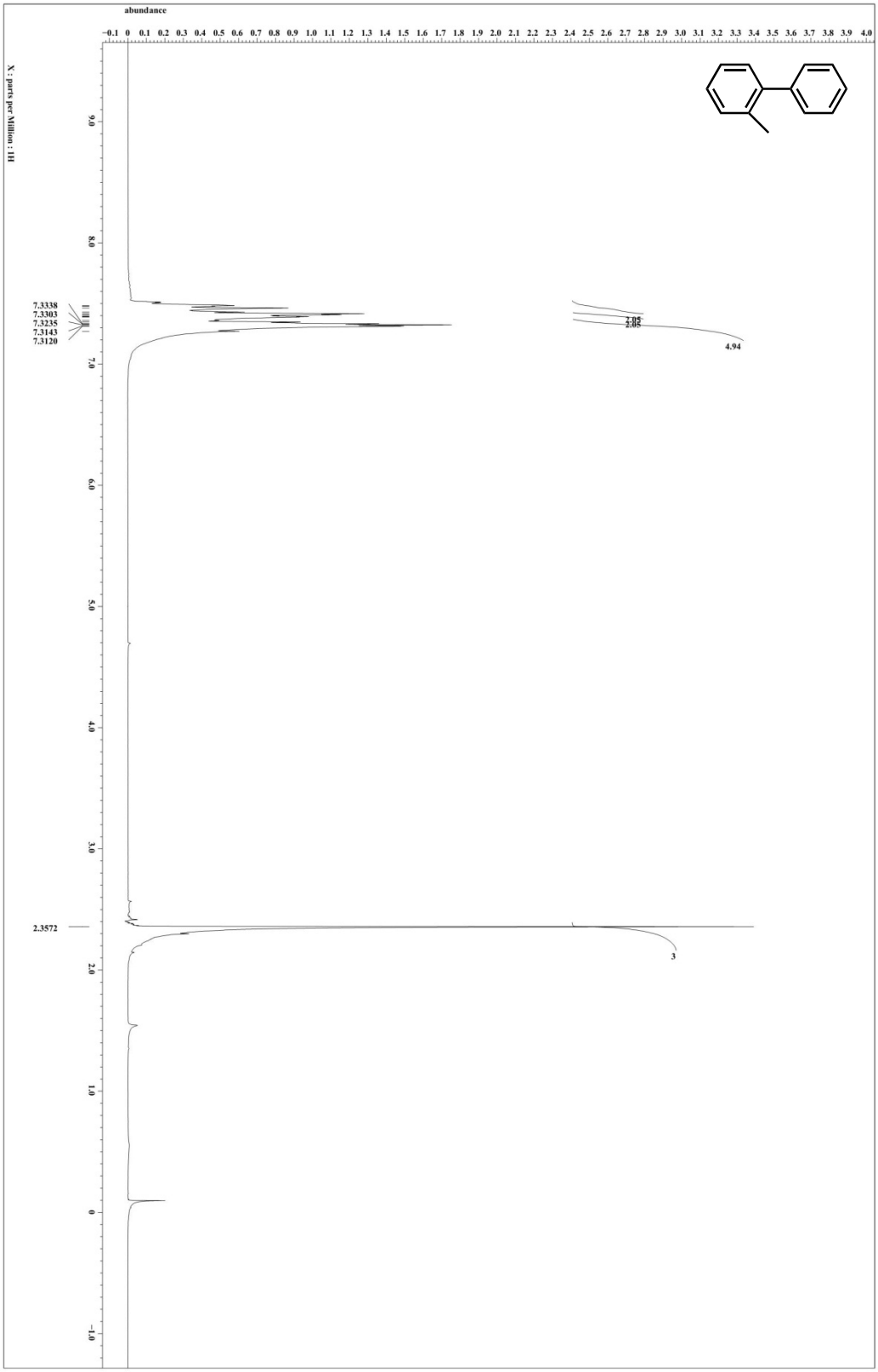


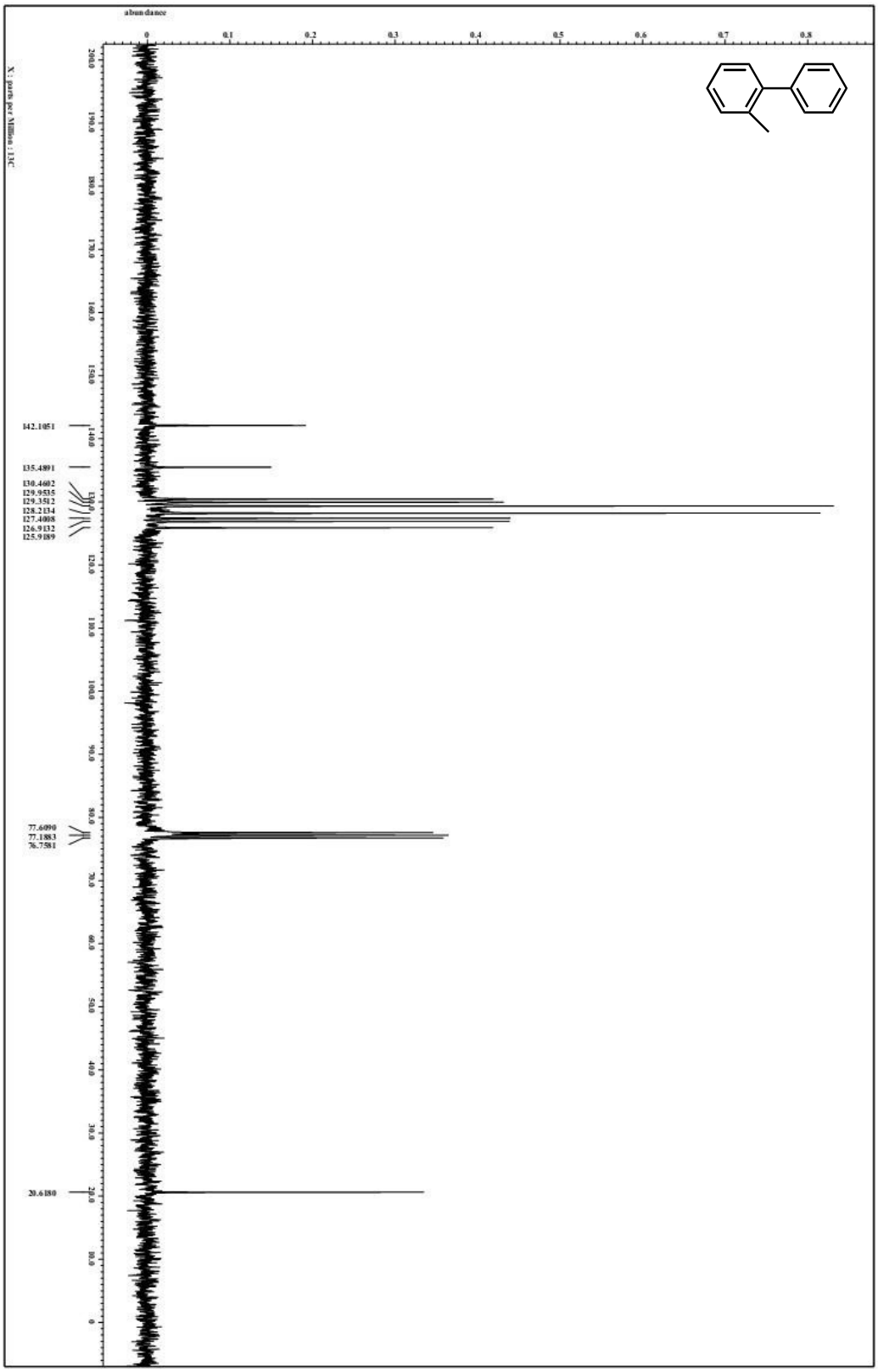


Formula: C13H12 CAS:644-08-6 F.W.:168
Component: 1,1'-Biphenyl, 4-methyl- $$ Biphenyl, 4-methyl- $$ p-Methylbiphenyl $$ p-Methyldiphenyl $$ 4-Methylbiphenyl $$ 4-Methyldiphenyl $$ 4-Phenyltoluene $$ 1-Methyl-4-phenylbenzene $$ FEMA 3186 $$ 4-Methyl-1,1'-biphenyl $$ p-Phenyltoluene $$

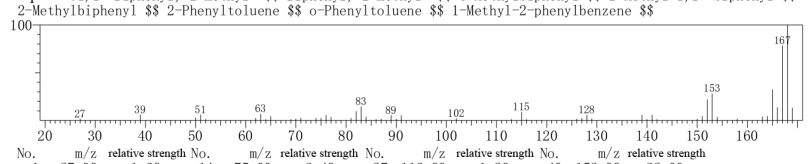


No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength
1	30.00	0.40	14	75.00	1.20	27	101.00	0.80	40	152.00	21.20
2	39.00	4.00	15	76.00	3.60	28	102.00	2.00	41	153.00	15.20
3	50.00	2.40	16	77.00	1.20	29	113.00	0.80	42	154.00	2.00
4	51.00	2.80	17	81.00	2.00	30	115.00	6.80	43	163.00	2.00
5	52.00	1.20	18	82.00	8.40	31	116.00	0.80	44	164.00	2.40
6	62.00	1.60	19	83.00	10.00	32	125.00	0.40	45	165.00	23.20
7	63.00	3.20	20	84.00	5.20	33	126.00	1.60	46	166.00	8.00
8	64.00	1.20	21	86.00	1.20	34	127.00	1.20	47	167.00	63.20
9	65.00	2.40	22	87.00	0.80	35	128.00	3.20	48	168.00	100.00
10	69.00	0.40	23	88.00	0.80	36	139.00	4.00	49	169.00	14.00
11	70.00	3.20	24	89.00	2.80	37	141.00	2.80	50	170.00	0.80
12	71.00	0.40	25	90.00	1.60	38	150.00	1.20			
13	74.00	1.20	26	91.00	4.80	39	151.00	4.40			

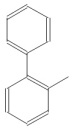


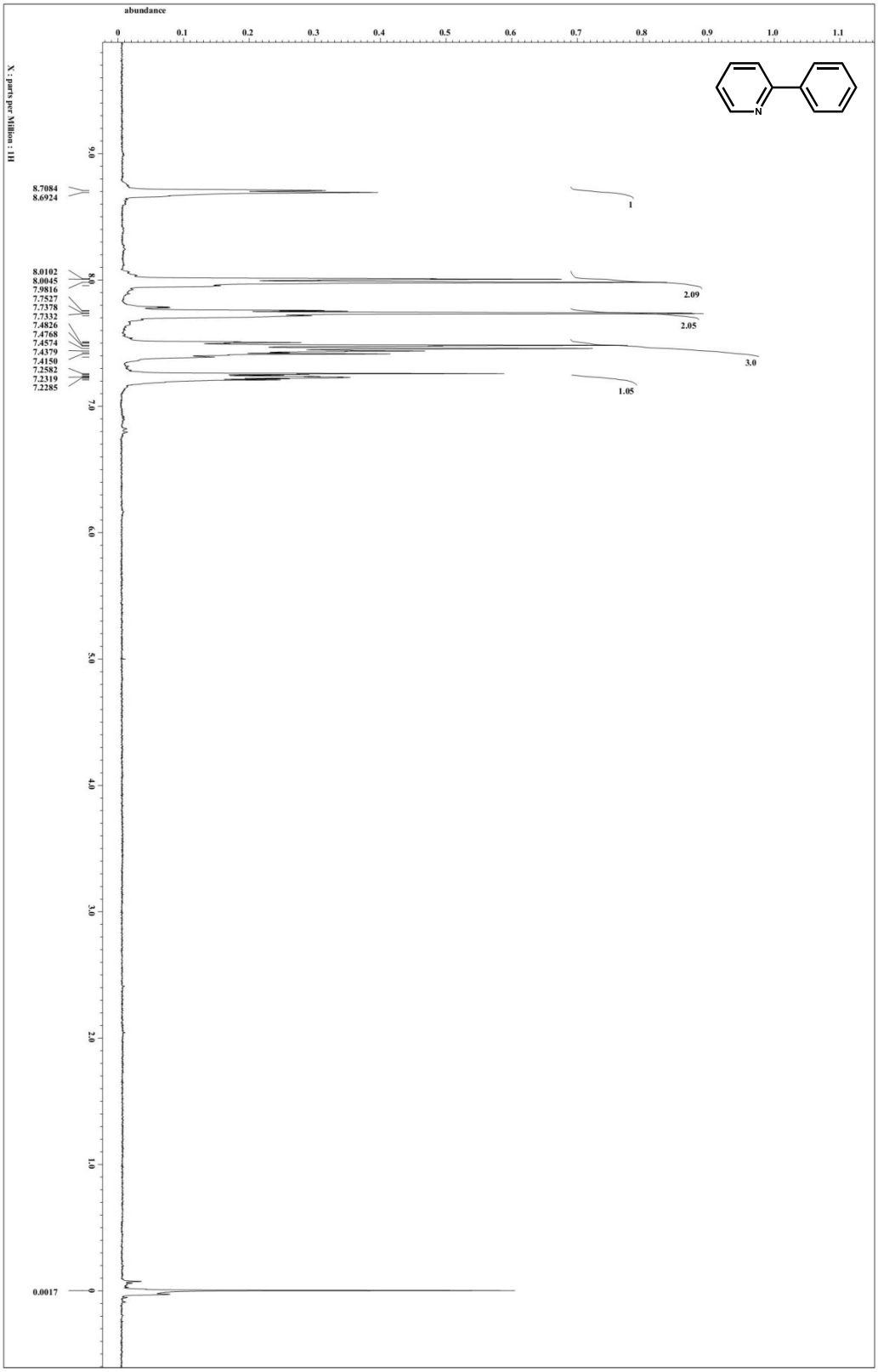


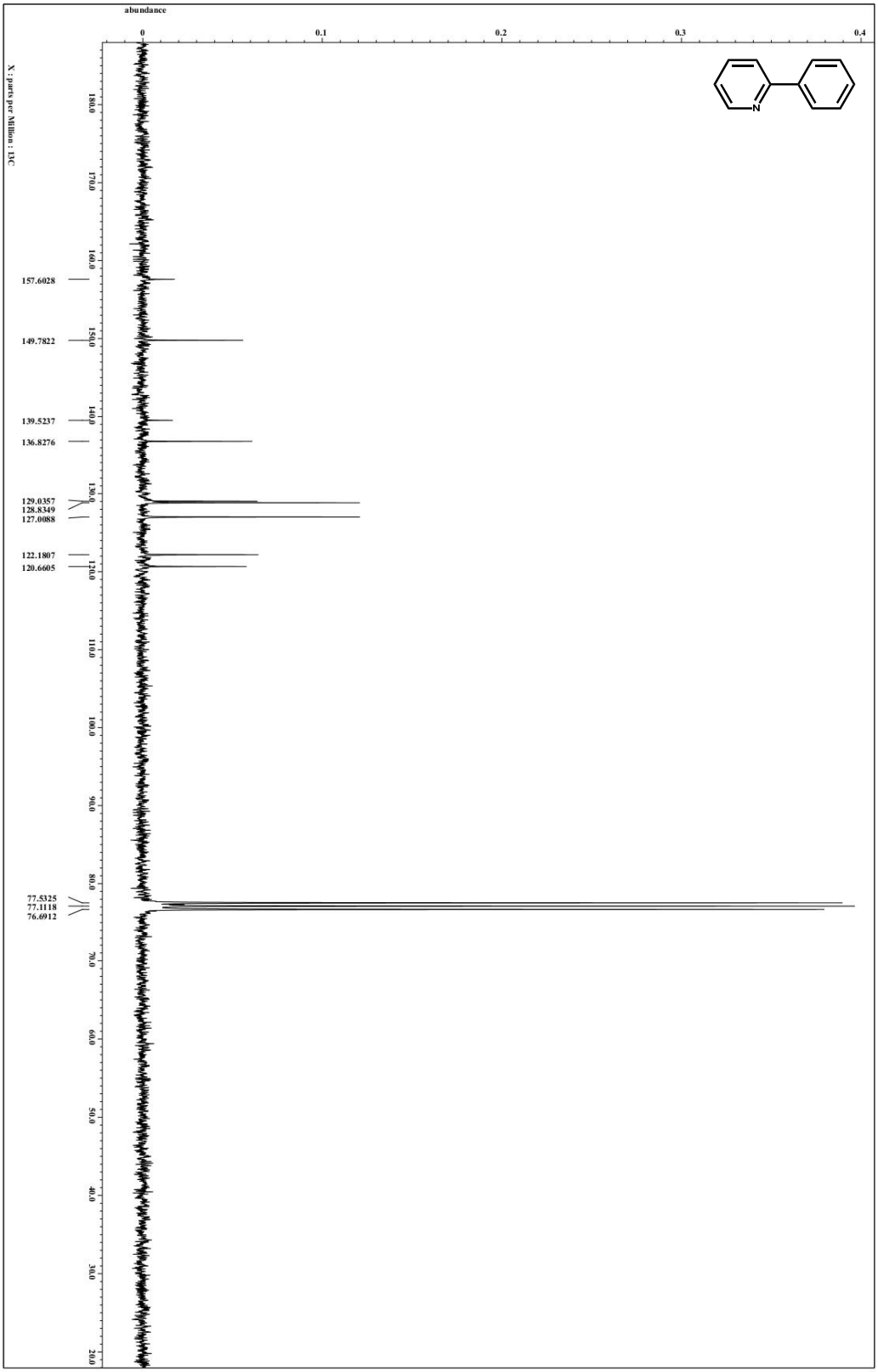
Formula: C13H12 CAS:643-58-3 F.W.:168
Component: 1,1'-Biphenyl, 2-methyl- $$ Biphenyl, 2-methyl- $$ o-Methylbiphenyl $$ 2-Methyl-1,1'-biphenyl $$ 2-Methylbiphenyl $$ 2-Phenyltoluene $$ o-Phenyltoluene $$ 1-Methyl-2-phenylbenzene $$



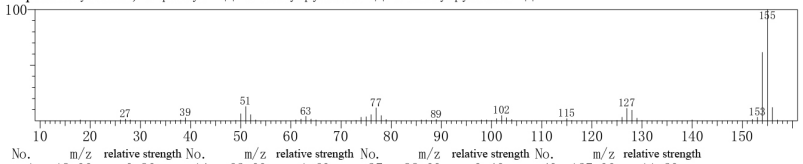
No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength
1	27.00	1.60	14	75.00	2.40	27	113.00	1.20	40	152.00	22.00
2	39.00	6.00	15	76.00	5.60	28	115.00	8.80	41	153.00	28.00
3	50.00	2.80	16	77.00	3.60	29	116.00	1.20	42	154.00	3.60
4	51.00	6.00	17	81.00	2.40	30	126.00	1.60	43	158.00	1.60
5	52.00	1.20	18	82.00	9.60	31	127.00	2.40	44	163.00	4.00
6	62.00	2.40	19	83.00	14.40	32	128.00	5.60	45	164.00	4.40
7	63.00	6.80	20	84.00	4.00	33	129.00	2.00	46	165.00	32.40
8	64.00	1.20	21	86.00	1.20	34	139.00	5.60	47	166.00	13.60
9	65.00	4.40	22	87.00	1.60	35	140.00	1.20	48	167.00	78.40
10	69.00	1.20	23	89.00	5.20	36	141.00	5.60	49	168.00	100.00
11	70.00	1.60	24	90.00	1.60	37	142.00	1.20	50	169.00	13.20
12	71.00	2.40	25	91.00	5.20	38	150.00	1.60			
13	74.00	2.40	26	102.00	2.00	39	151.00	4.40			



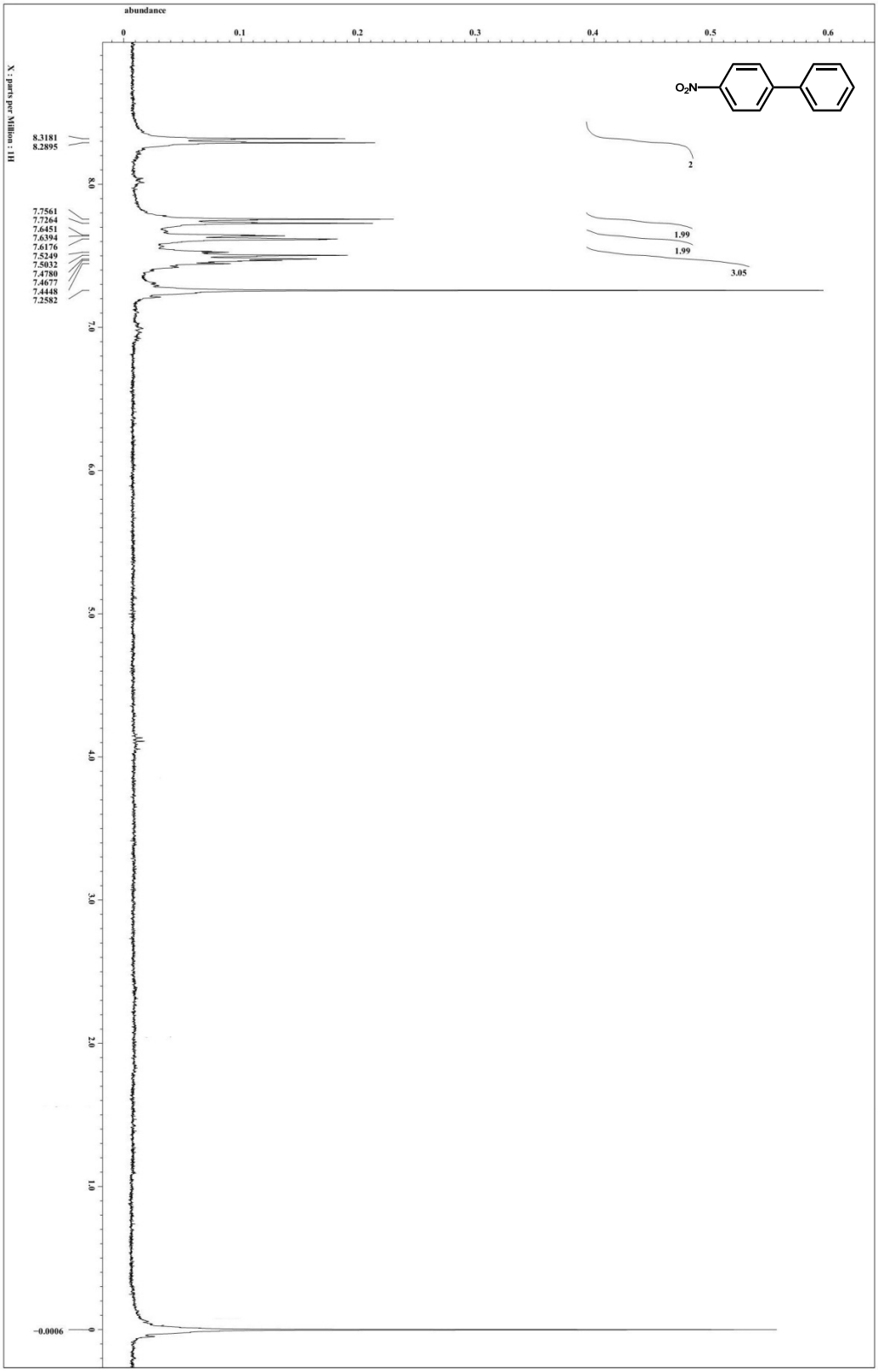


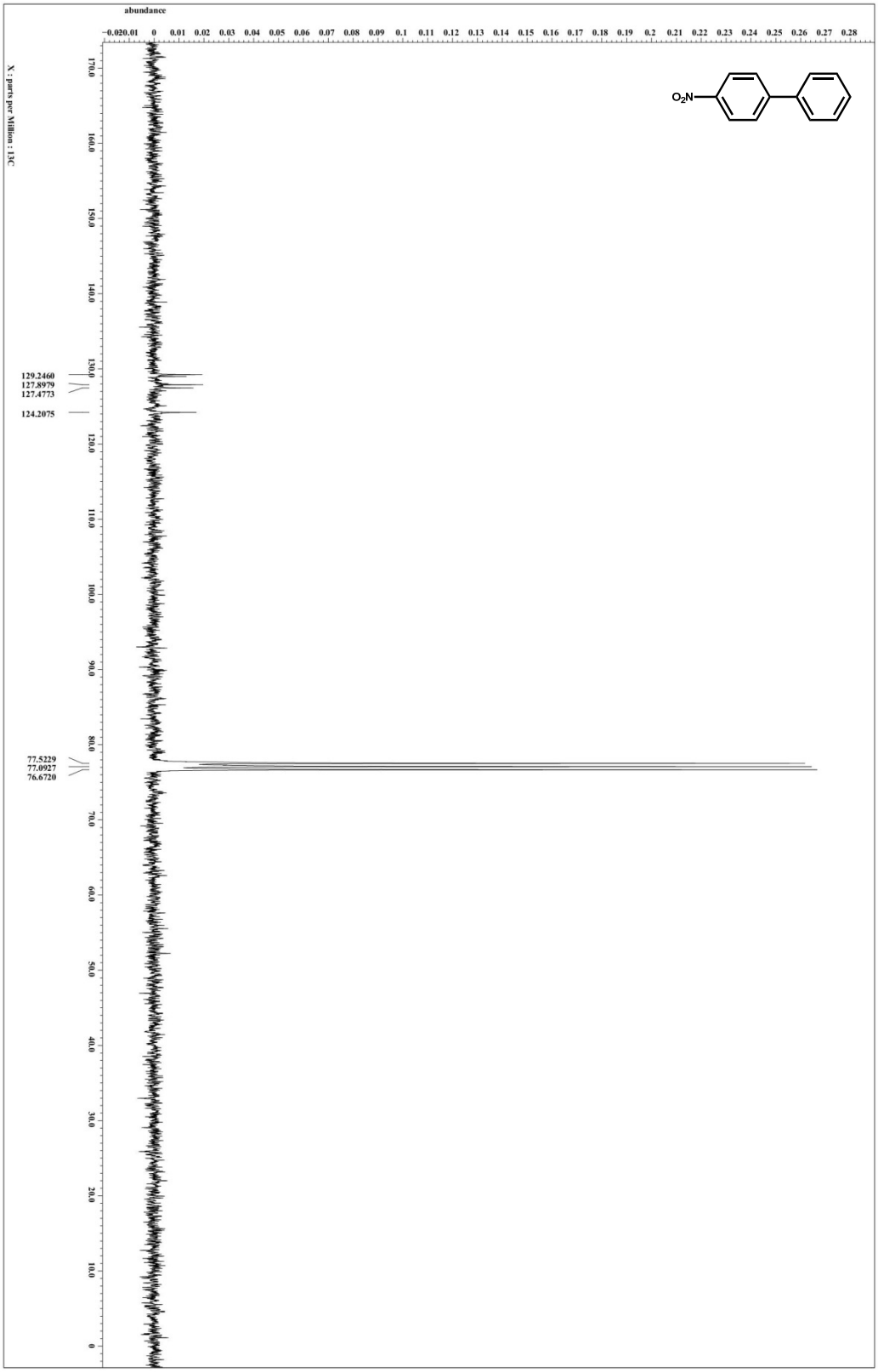


Formula : C11H9N CAS:1008-89-5 F.W. : 155
Component: Pyridine, 2-phenyl- $$ 2-Phenylpyridine $$ o-Phenylpyridine $$

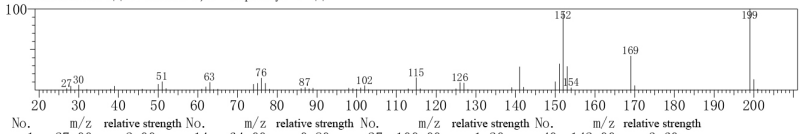


No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength
1	18.00	0.80	14	62.00	1.60	27	88.00	0.40	40	127.00	11.20
2	26.00	0.80	15	63.00	4.00	28	89.00	1.20	41	128.00	9.60
3	27.00	1.60	16	64.00	1.60	29	98.00	0.80	42	129.00	2.40
4	28.00	0.80	17	65.00	0.80	30	99.00	0.80	43	130.00	0.40
5	37.00	0.40	18	73.00	0.40	31	100.00	0.40	44	140.00	0.80
6	38.00	0.80	19	74.00	3.20	32	101.00	2.00	45	152.00	1.20
7	39.00	2.80	20	75.00	3.60	33	102.00	4.80	46	153.00	3.20
8	49.00	0.40	21	76.00	5.60	34	103.00	2.80	47	154.00	61.60
9	50.00	6.40	22	77.00	11.60	35	104.00	1.20	48	155.00	100.00
10	51.00	12.80	23	78.00	4.80	36	115.00	2.00	49	156.00	12.00
11	52.00	5.60	24	79.00	1.20	37	116.00	0.40	50	157.00	0.80
12	53.00	0.80	25	86.00	0.80	38	125.00	0.40			
13	61.00	0.80	26	87.00	0.80	39	126.00	3.20			

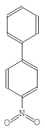


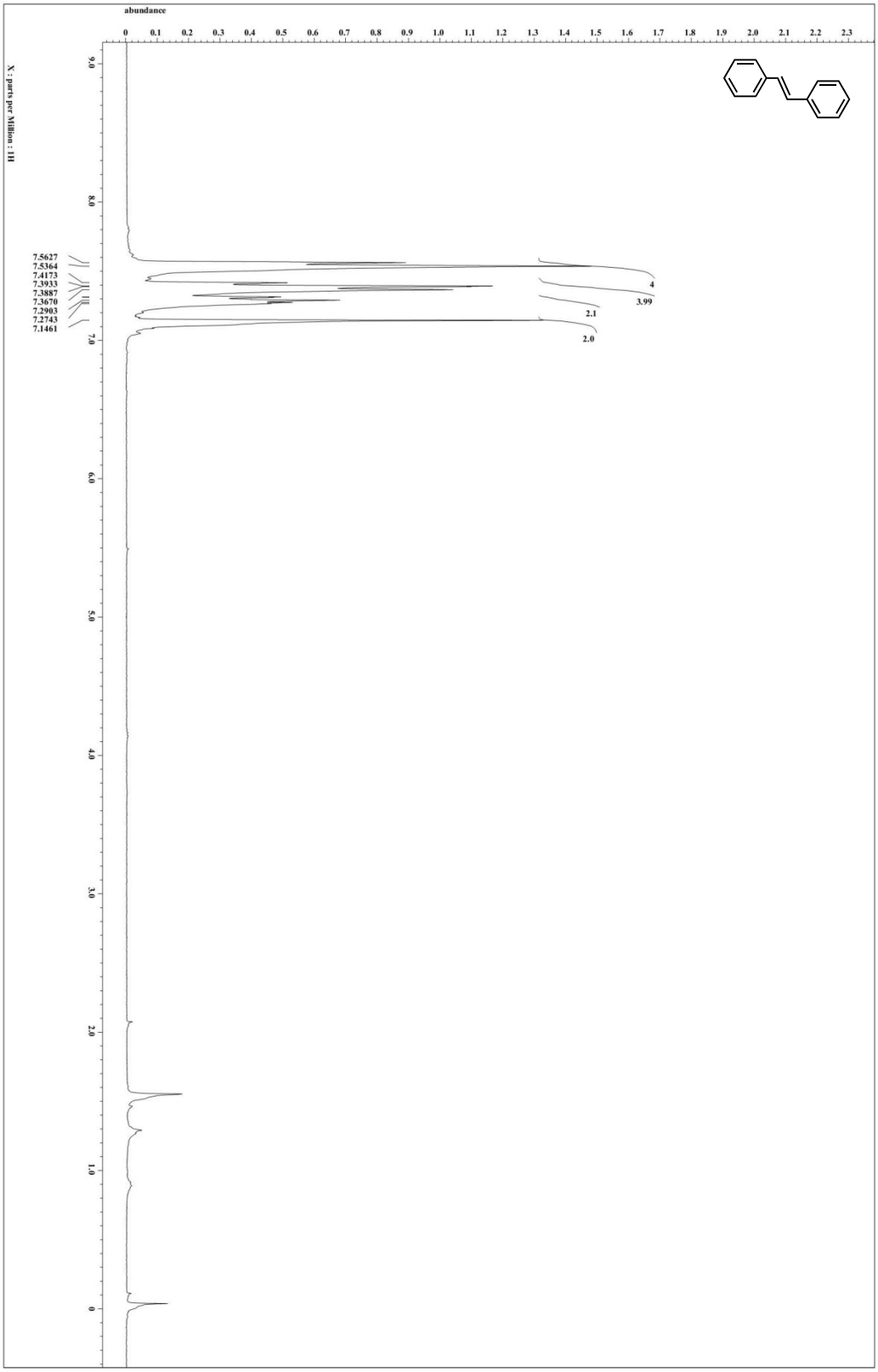


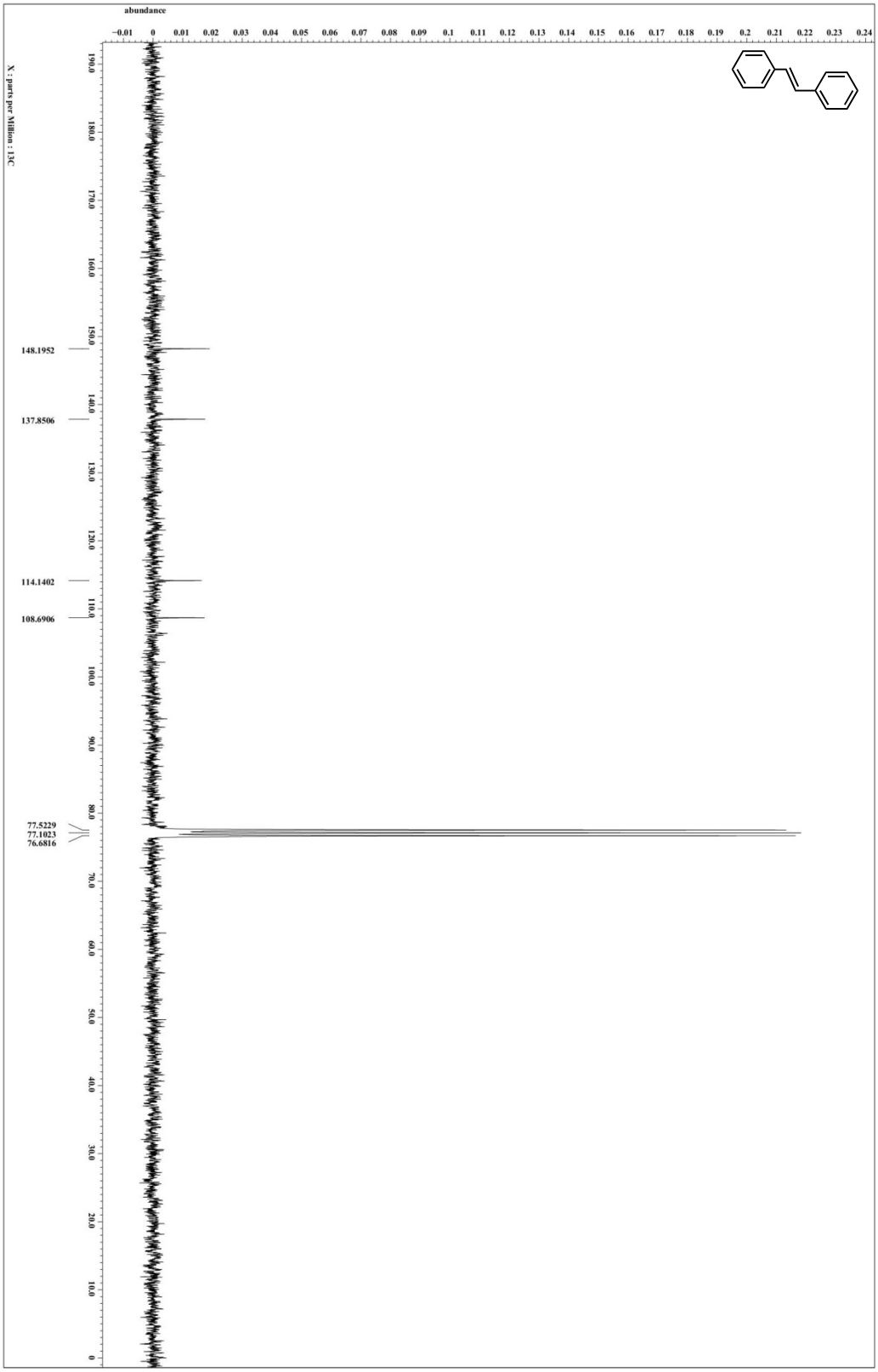
Formula : C12H9NO2 CAS:92-93-3 F.W. : 199
Component: 1,1'-Biphenyl, 4-nitro- $$ Biphenyl, 4-nitro- $$ p-Nitrobiphenyl $$ p-Nitrodiphenyl $$ Ba 2794 $$ 1-Nitro-4-phenylbenzene $$ 4-Nitrobiphenyl $$ 4-Nitrodiphenyl $$ p-Phenylnitrobenzene $$ PNB $$ 4-Phenylnitrobenzene $$ 4-Nitro-1,1'-biphenyl # $$



No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength
1	27.00	2.00	14	64.00	0.80	27	100.00	1.20	40	142.00	3.60
2	28.00	4.80	15	65.00	1.20	28	101.00	2.80	41	150.00	10.40
3	30.00	6.40	16	74.00	7.20	29	102.00	5.60	42	151.00	32.40
4	32.00	0.80	17	75.00	8.40	30	103.00	0.80	43	152.00	96.00
5	38.00	1.20	18	76.00	14.80	31	113.00	1.60	44	153.00	29.20
6	39.00	4.80	19	77.00	8.40	32	115.00	15.20	45	154.00	2.80
7	46.00	1.20	20	78.00	1.20	33	116.00	1.60	46	169.00	42.00
8	50.00	7.20	21	86.00	2.00	34	125.00	1.60	47	170.00	5.60
9	51.00	10.40	22	87.00	3.20	35	126.00	9.20	48	199.00	100.00
10	52.00	2.00	23	88.00	1.60	36	127.00	8.80	49	200.00	13.20
11	61.00	1.20	24	89.00	2.40	37	128.00	0.80	50	201.00	1.20
12	62.00	4.00	25	98.00	2.40	38	139.00	3.20			
13	63.00	9.60	26	99.00	2.00	39	141.00	28.80			

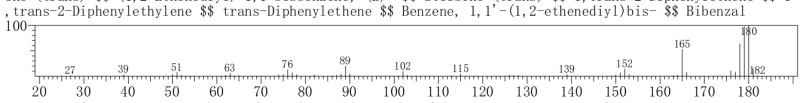




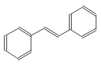


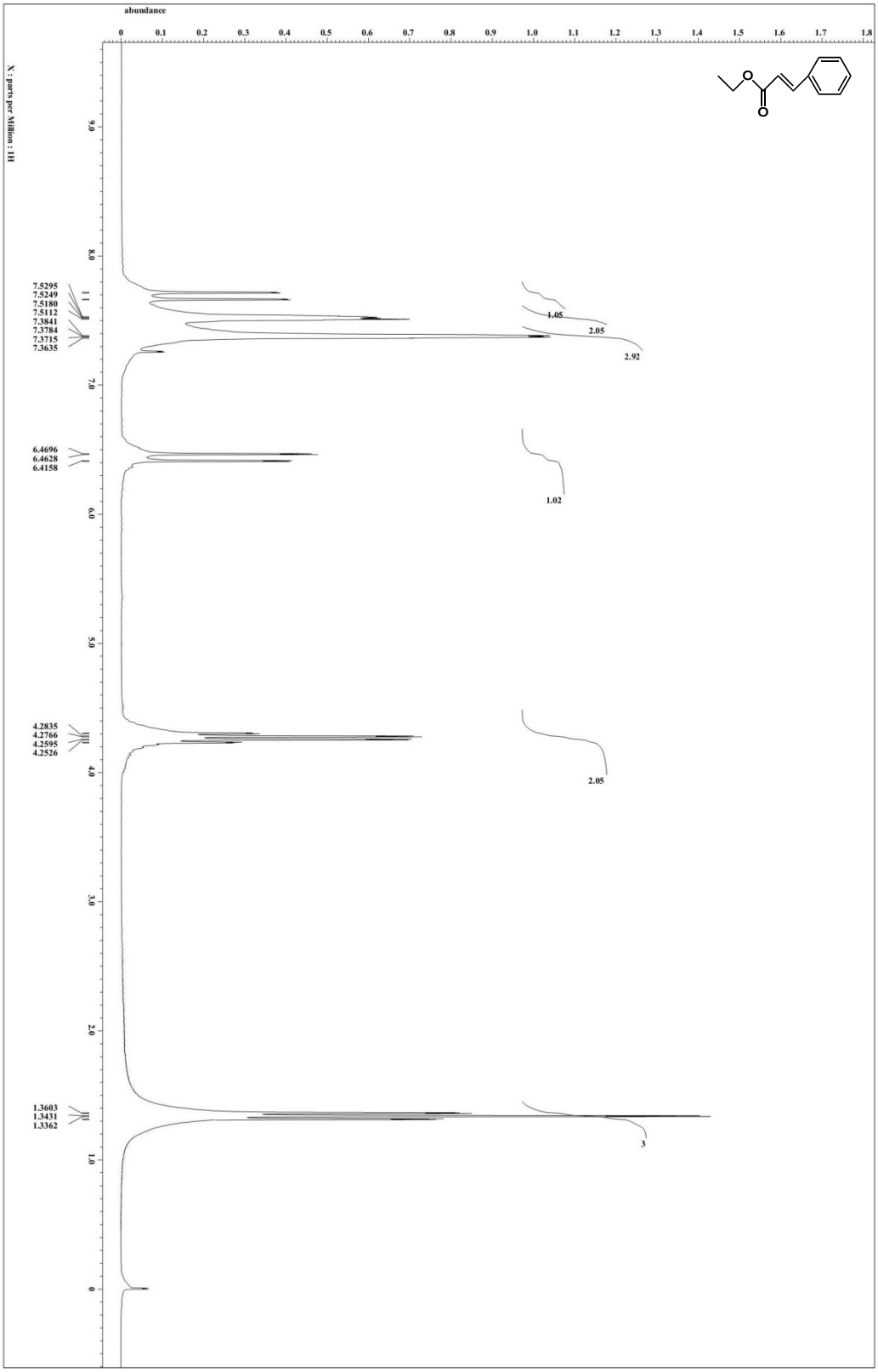
Formula : C14H12 CAS:103-30-0 F.W. : 180

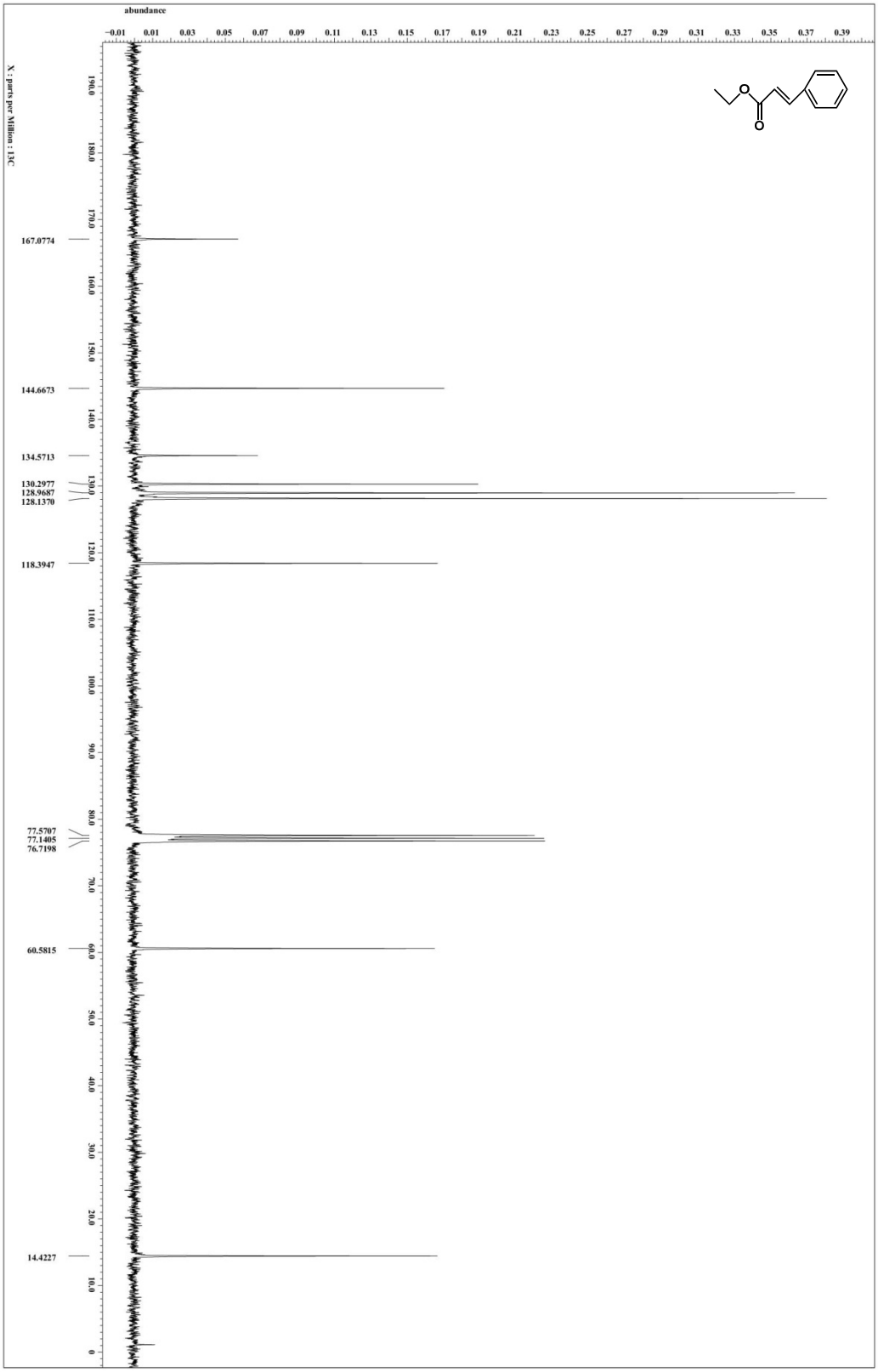
Component : (E)-Stilbene $$ Benzene, 1,1'-(1,2-ethenediyl)bis-, (E)- $$ Stilbene, (E)- $$ (E)-1,2-Diphenylethylene $$ trans-.alpha.,.beta.-Diphenylethylene $$ trans-Stilbene $$ trans-1,2-Diphenylethene $$ trans-1,2-Diphenylethylene $$ (E)-1,2-Diphenylethene $$ Dibenzal, (E)- $$ Dibenzylidne, (E)- $$ 1,2-Diphenylethylene (trans) $$ (1,2-Ethenediyl)-1,1-bisbenzene, (E)- $$ Stilbene (trans) $$ 1,trans-2-Diphenylethene $$ 1,trans-2-Diphenylethylene $$ trans-Diphenylethene $$ Benzene, 1,1'-(1,2-ethenediyl)bis- $$ Bibenzal



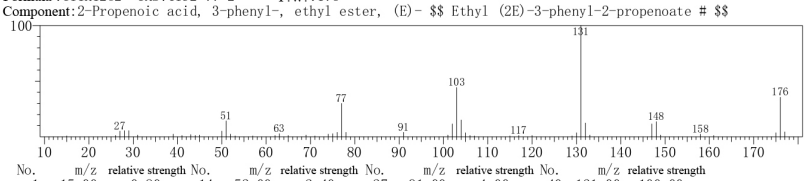
No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength
1	27.00	0.80	14	77.00	7.20	27	113.00	1.20	40	165.00	53.20
2	39.00	3.20	15	78.00	3.20	28	115.00	4.40	41	166.00	7.60
3	50.00	3.60	16	82.00	2.80	29	126.00	2.40	42	167.00	0.40
4	51.00	7.60	17	86.00	1.20	30	127.00	2.00	43	175.00	0.80
5	52.00	2.40	18	87.00	2.00	31	128.00	2.00	44	176.00	10.80
6	62.00	2.00	19	88.00	4.40	32	139.00	3.60	45	177.00	8.40
7	63.00	6.00	20	89.00	20.00	33	150.00	2.80	46	178.00	63.60
8	64.00	1.20	21	90.00	4.80	34	151.00	6.80	47	179.00	98.00
9	65.00	1.60	22	98.00	0.80	35	152.00	14.00	48	180.00	100.00
10	69.00	0.40	23	99.00	0.80	36	153.00	4.00	49	181.00	14.80
11	74.00	2.80	24	101.00	1.20	37	154.00	0.40	50	182.00	1.20
12	75.00	3.60	25	102.00	9.60	38	163.00	1.60			
13	76.00	13.20	26	103.00	2.00	39	164.00	2.40			



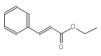


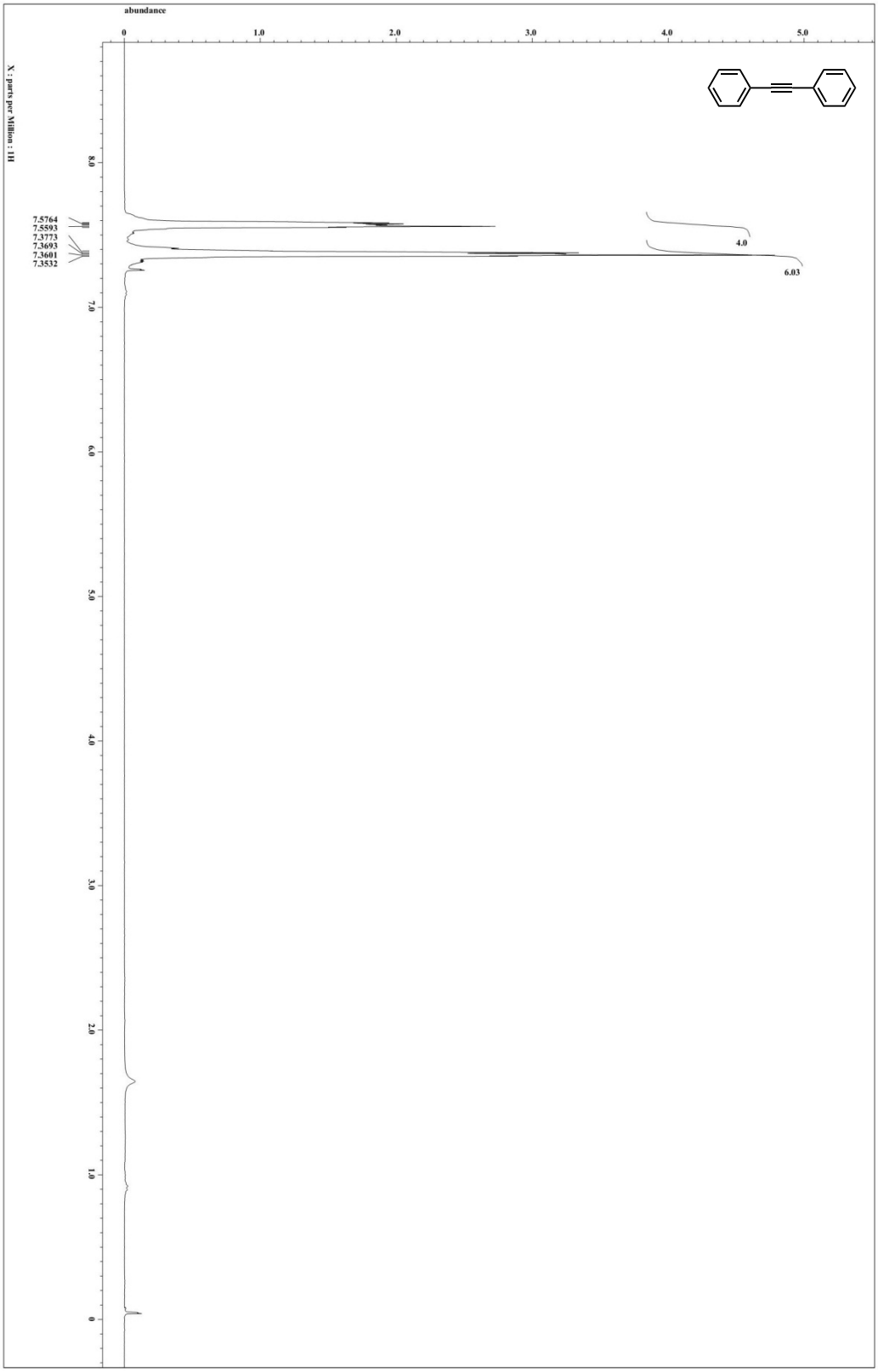


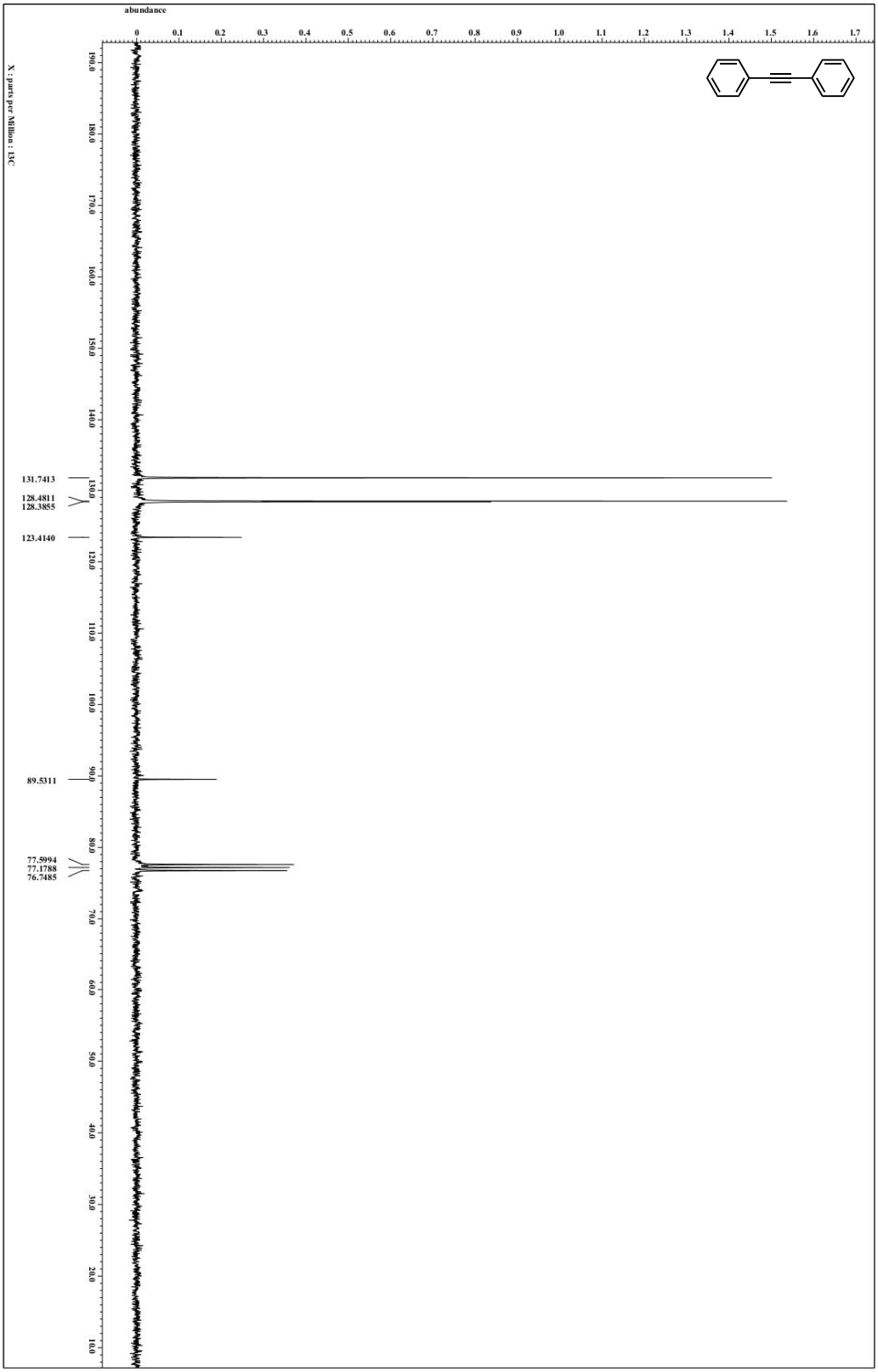
Formula : C11H1202 CAS:4192-77-2 F.W.:176
Component: 2-Propenoic acid, 3-phenyl-, ethyl ester, (E)- $$ Ethyl (2E)-3-phenyl-2-propenoate # $$



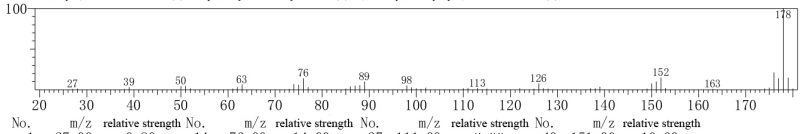
No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength
1	15.00	0.80	14	52.00	2.40	27	91.00	4.00	40	131.00	100.00
2	26.00	1.20	15	53.00	0.80	28	101.00	1.60	41	132.00	12.40
3	27.00	5.20	16	57.00	0.80	29	102.00	11.60	42	133.00	1.60
4	28.00	5.60	17	62.00	1.20	30	103.00	44.40	43	147.00	11.60
5	29.00	5.60	18	63.00	2.80	31	104.00	15.20	44	148.00	13.60
6	31.00	1.60	19	65.00	1.20	32	105.00	3.60	45	149.00	1.60
7	39.00	2.40	20	69.00	1.60	33	106.00	1.20	46	158.00	2.40
8	41.00	1.20	21	71.00	0.80	34	107.00	0.80	47	161.00	1.20
9	43.00	2.00	22	74.00	2.40	35	115.00	0.80	48	175.00	3.60
10	44.00	1.20	23	75.00	2.80	36	117.00	1.20	49	176.00	35.60
11	45.00	1.60	24	76.00	4.00	37	120.00	1.20	50	177.00	4.40
12	50.00	5.20	25	77.00	30.00	38	129.00	0.80			
13	51.00	14.40	26	78.00	4.00	39	130.00	3.60			



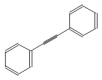


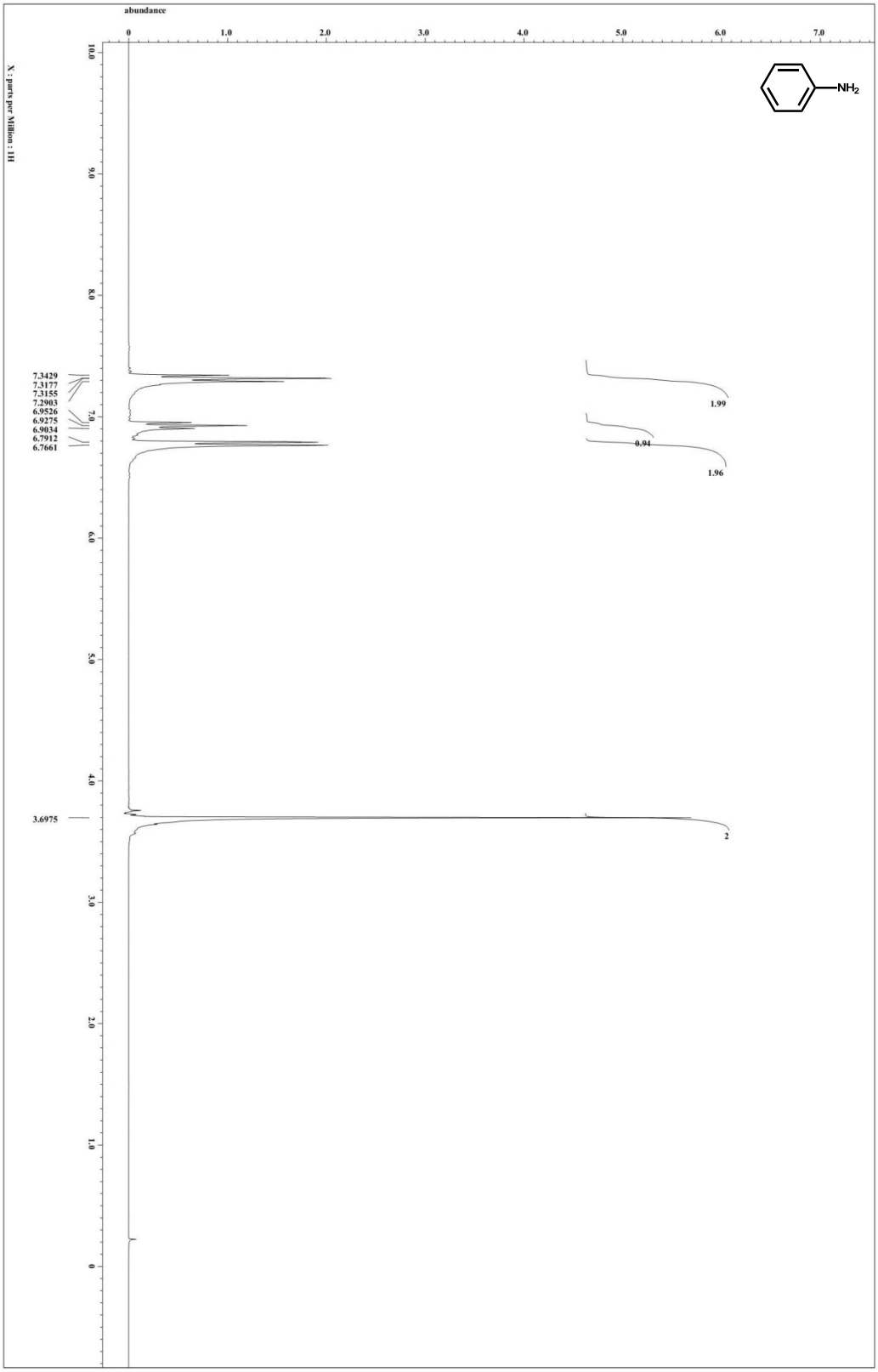


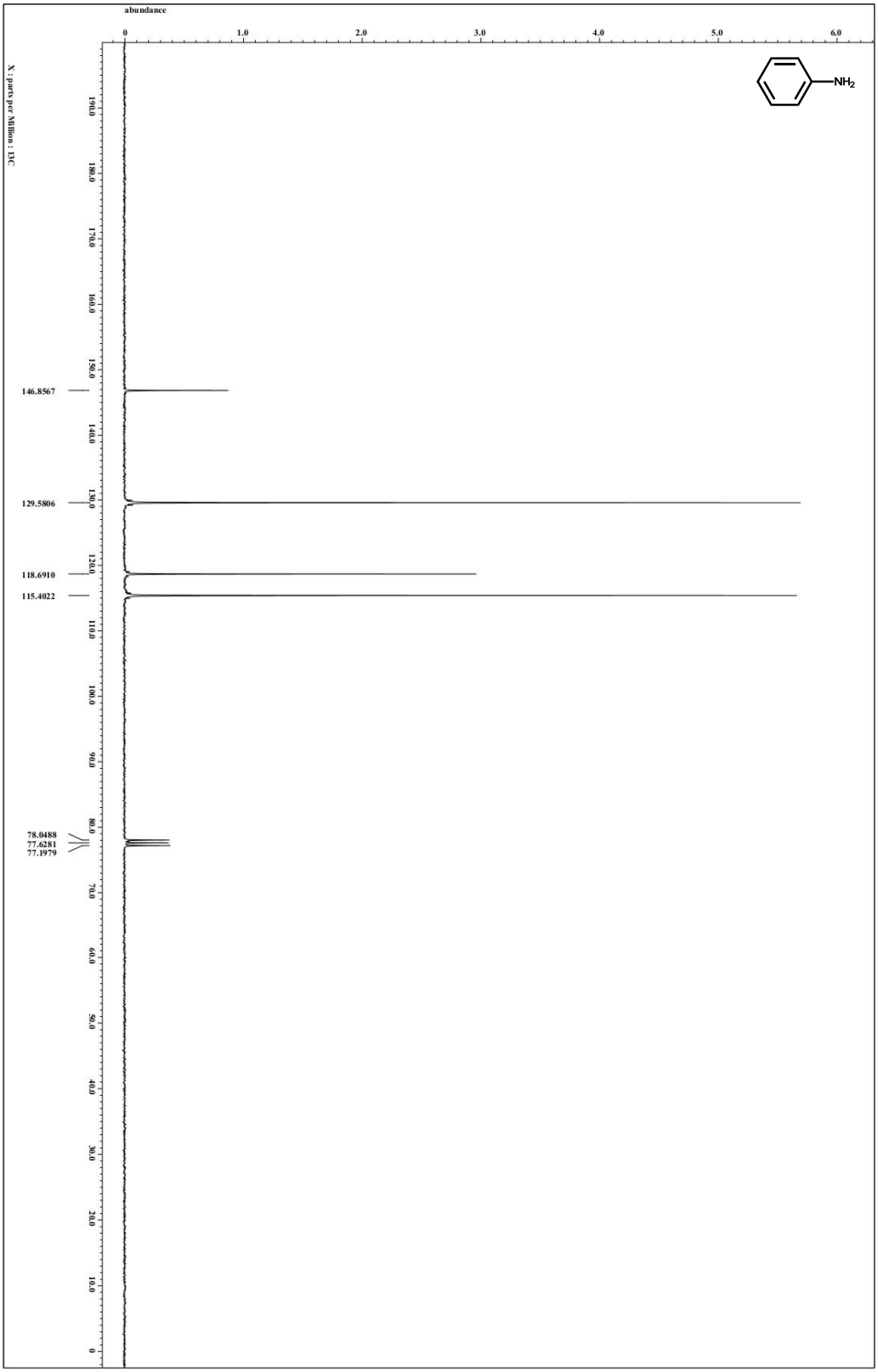
Formula:C14H10 CAS:501-65-5 **F.W.**:178
Component:Diphenylethyne $$ Benzene, 1,1'-(1,2-ethynediyl)bis- $$ Acetylene, diphenyl- $$ Diphenylacetylene $$ Ethyne, diphenyl- $$ Tolan $$ Tolane $$ 1,2-Diphenylacetylene $$ sym-Diphenylacetylene $$ 1,1'-(1,2-Ethanediyl)bisbenzene $$ Diphenyl acetylene $$ (Phenylethynyl)benzene # $$



No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength
1	27.00	0.80	14	76.00	14.00	27	111.00	2.00	40	151.00	10.00
2	28.00	1.20	15	77.00	3.20	28	113.00	2.00	41	152.00	14.80
3	38.00	0.80	16	85.00	1.20	29	115.00	1.20	42	153.00	2.00
4	39.00	3.20	17	86.00	4.00	30	122.00	1.60	43	163.00	0.80
5	50.00	4.40	18	87.00	4.80	31	125.00	1.20	44	174.00	1.20
6	51.00	4.40	19	88.00	5.60	32	126.00	7.60	45	175.00	2.40
7	52.00	1.60	20	89.00	10.00	33	127.00	1.60	46	176.00	21.20
8	61.00	1.20	21	98.00	5.20	34	128.00	1.20	47	177.00	14.00
9	62.00	3.20	22	99.00	2.80	35	137.00	1.60	48	178.00	100.00
10	63.00	6.40	23	100.00	1.60	36	138.00	1.60	49	179.00	14.80
11	73.00	0.80	24	101.00	0.80	37	139.00	3.60	50	180.00	1.20
12	74.00	6.80	25	102.00	2.40	38	149.00	1.20			
13	75.00	6.00	26	110.00	1.60	39	150.00	7.60			

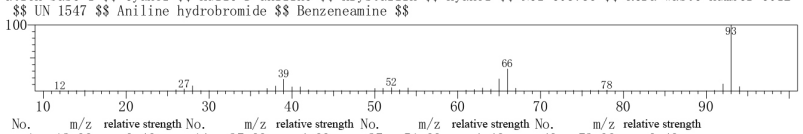




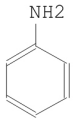


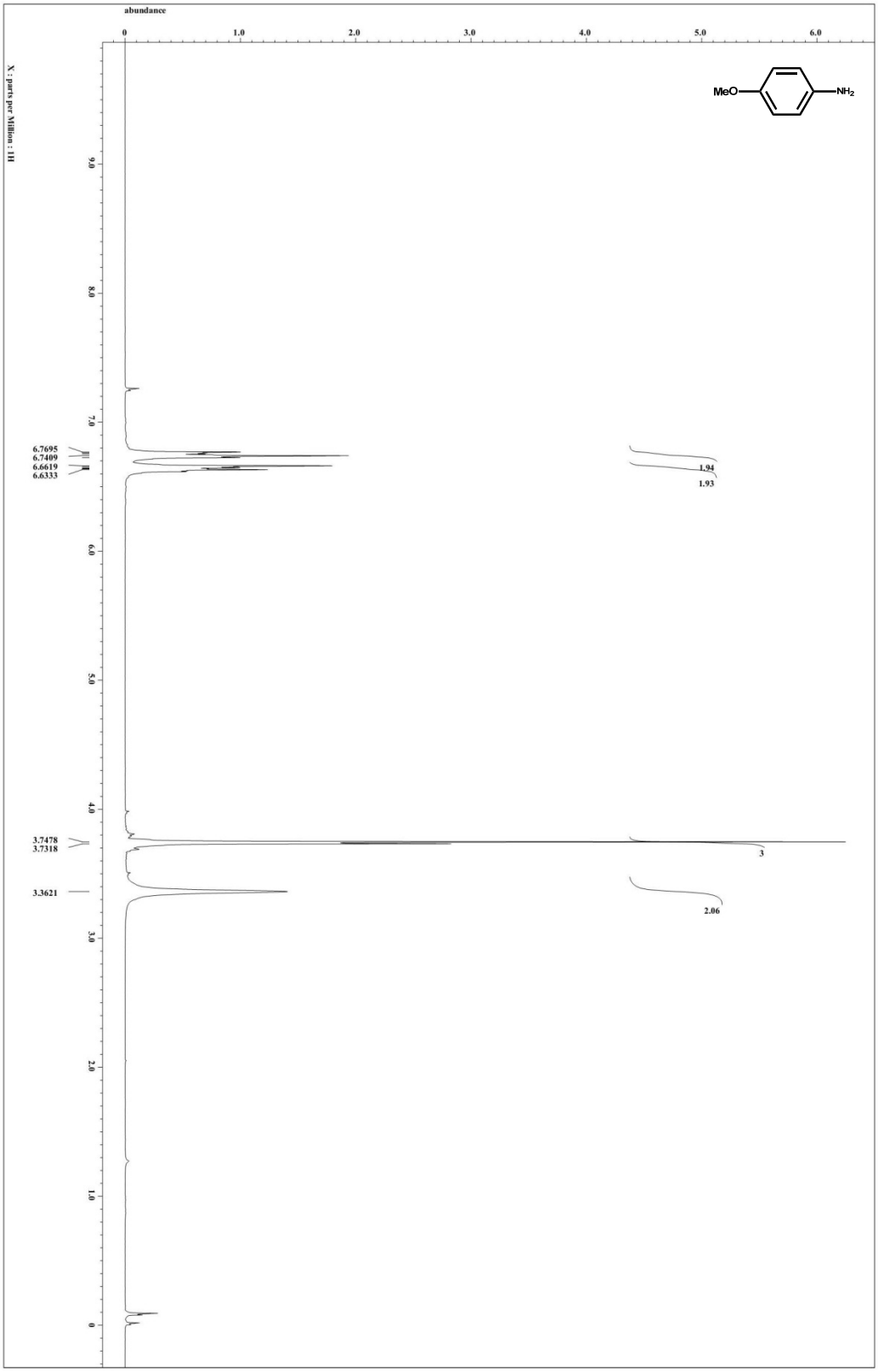
Formula: C6H7N CAS:62-53-3 F.W.:93

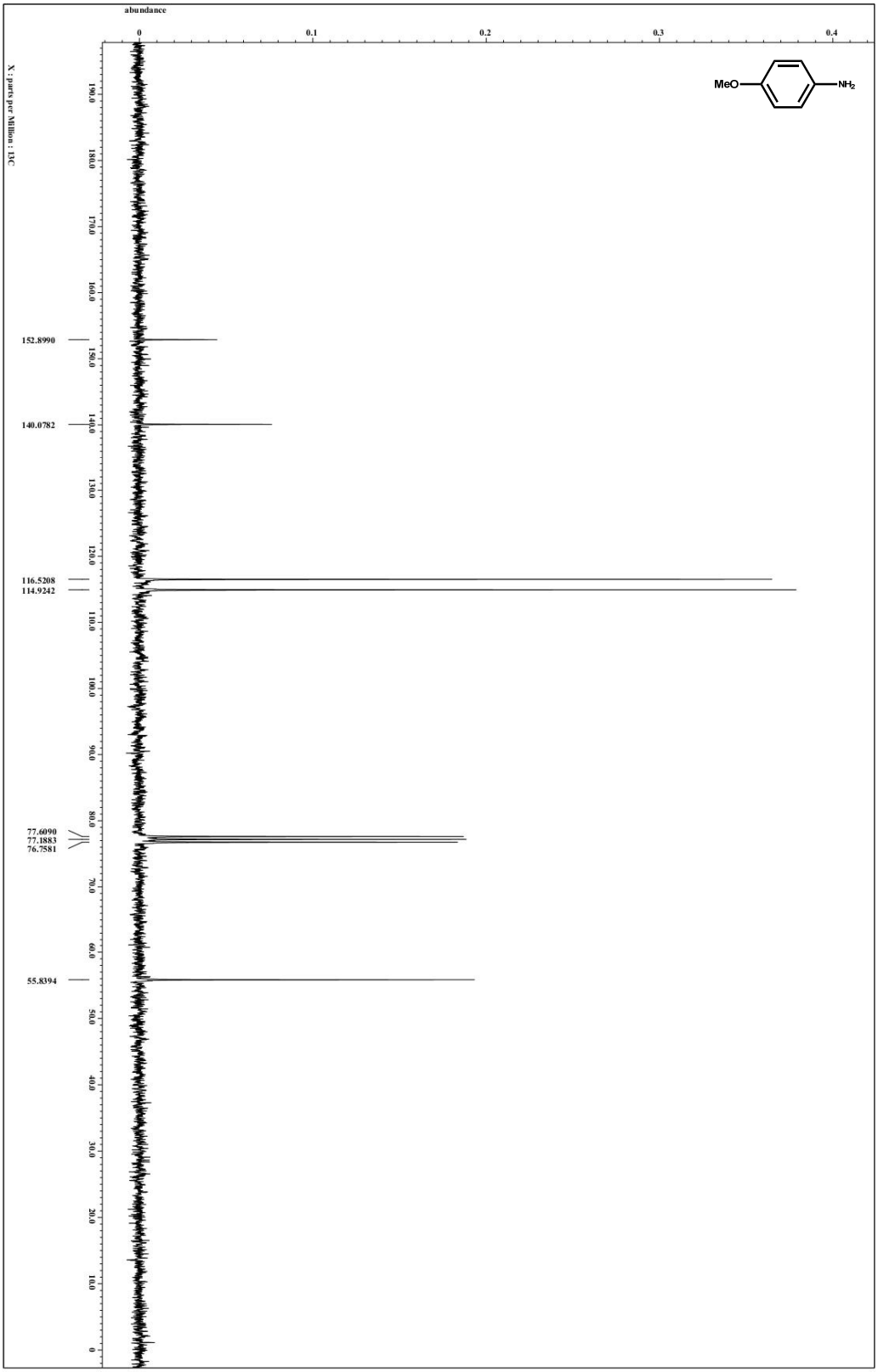
Component: Aniline $$ Benzenamine $$ Aminobenzene $$ Aminophen $$ Anyvim $$ Benzene, amino- $$ Blue Oil $$ C.I. 76000 $$ Phenylamine $$ Aniline Oil $$ Aniline reagent $$ Anilin $$ Anilina $$ Benzidam $$ C.I. Oxidation base 1 $$ Cyanol $$ Huile D'aniline $$ Krystallin $$ Kyanol $$ NCI-C03736 $$ Rcra waste number U012 $$ UN 1547 $$ Aniline hydrobromide $$ Benzeneamine $$



No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength
1	12.00	0.40	14	37.00	4.00	27	51.00	4.40	40	73.00	0.40
2	13.00	0.40	15	38.00	7.60	28	52.00	5.20	41	74.00	1.20
3	14.00	0.80	16	39.00	18.00	29	53.00	2.00	42	75.00	0.80
4	15.00	1.20	17	40.00	6.40	30	54.00	4.80	43	76.00	1.20
5	16.00	0.40	18	41.00	6.40	31	55.00	0.40	44	77.00	1.20
6	25.00	0.40	19	42.00	2.00	32	60.00	0.40	45	78.00	1.60
7	26.00	2.00	20	43.00	0.80	33	61.00	1.60	46	90.00	0.40
8	27.00	3.20	21	44.00	0.80	34	62.00	2.40	47	91.00	1.20
9	28.00	8.00	22	45.00	0.40	35	63.00	4.80	48	92.00	10.80
10	29.00	0.80	23	46.00	0.80	36	64.00	2.80	49	93.00	100.00
11	30.00	0.80	24	47.00	0.40	37	65.00	18.40	50	94.00	6.80
12	31.00	0.40	25	49.00	0.80	38	66.00	33.60			
13	36.00	0.40	26	50.00	4.00	39	67.00	4.40			

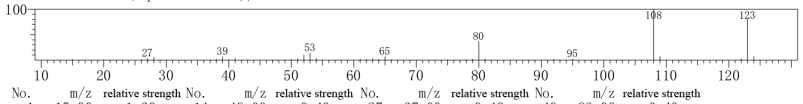




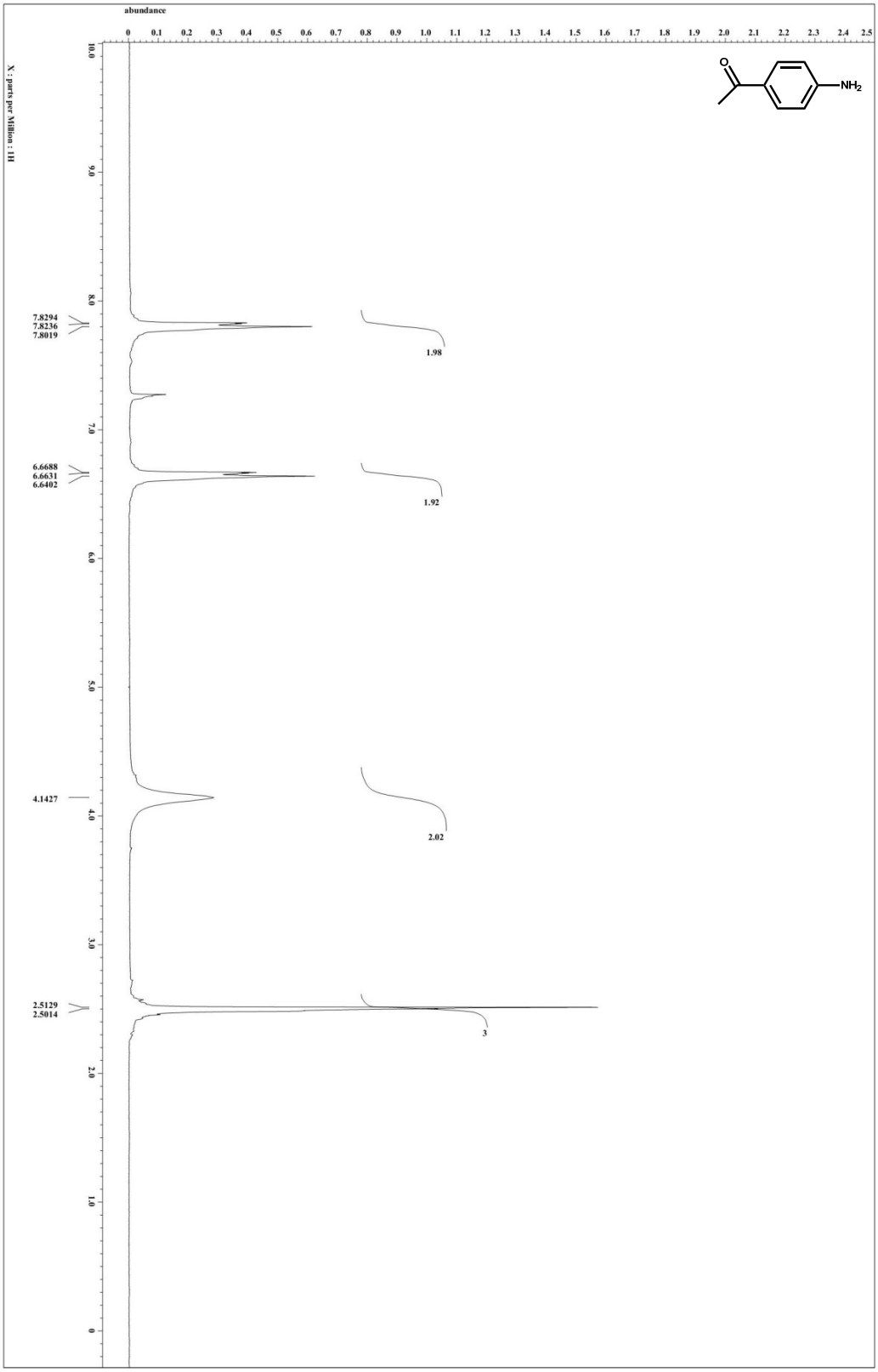


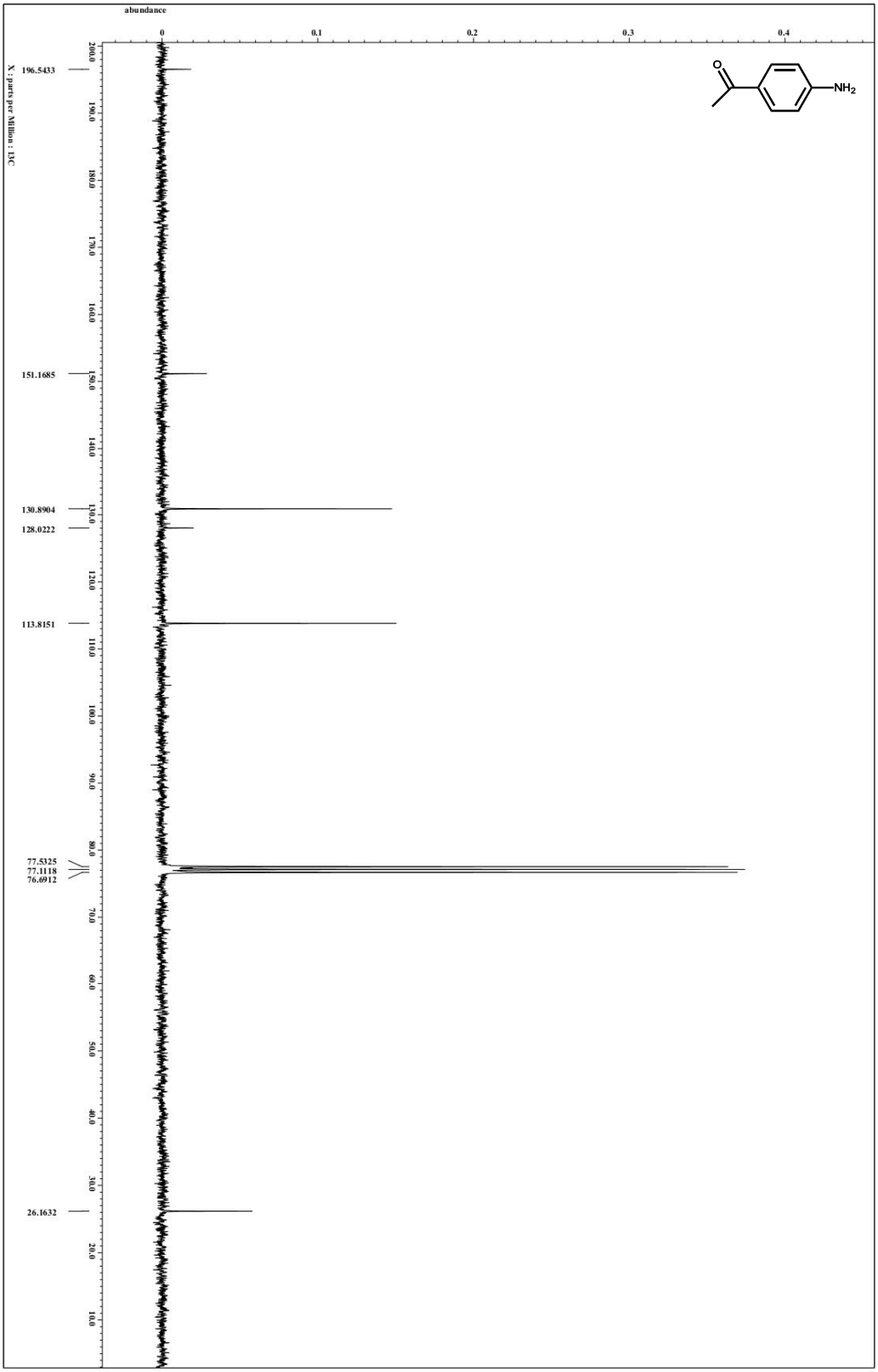
Formula: C7H9NO CAS:104-94-9 F.W.:123

Component: Benzenamine, 4-methoxy- $$ p-Anisidine $$ p-Aminoanisole $$ p-Anisylamine $$ p-Methoxyaniline $$ p-Methoxyphenylamine $$ 4-Aminoanisole $$ 4-Anisidine $$ 4-Methoxyaniline $$ 4-Methoxybenzenamine $$ 4-Methoxybenzeneamine $$ para-Anisidine $$ Aniline, p-methoxy- $$ Anisole, p-amino- $$ 1-Amino-4-methoxybenzene $$ 4-Methoxy-1-aminobenzene $$ .beta.-Anisidine $$ 1-Methoxy-4-amino-benzen (p-anisidin) $$ 1-Methoxy-4-amino-benzene / p-anisidine $$



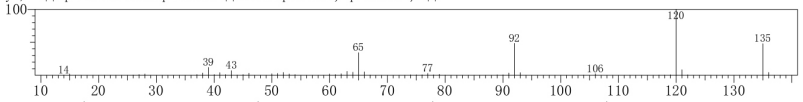
No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength
1	15.00	1.60	14	49.00	0.40	27	67.00	0.40	40	93.00	0.40
2	26.00	1.60	15	50.00	1.60	28	68.00	0.40	41	94.00	0.40
3	27.00	3.60	16	51.00	3.20	29	74.00	0.40	42	95.00	2.40
4	28.00	5.60	17	52.00	10.40	30	75.00	0.40	43	107.00	0.40
5	29.00	0.80	18	53.00	14.40	31	76.00	0.40	44	108.00	100.00
6	30.00	0.40	19	54.00	3.60	32	77.00	0.80	45	109.00	7.20
7	37.00	0.80	20	55.00	0.40	33	78.00	1.20	46	110.00	0.40
8	38.00	2.00	21	61.00	2.40	34	79.00	2.00	47	122.00	2.80
9	39.00	6.80	22	62.00	1.60	35	80.00	36.80	48	123.00	80.40
10	40.00	1.20	23	63.00	3.20	36	81.00	2.40	49	124.00	6.80
11	41.00	3.60	24	64.00	1.60	37	90.00	0.40	50	125.00	0.40
12	42.00	0.80	25	65.00	6.80	38	91.00	0.40			
13	47.00	0.80	26	66.00	1.20	39	92.00	2.00			



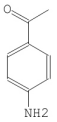


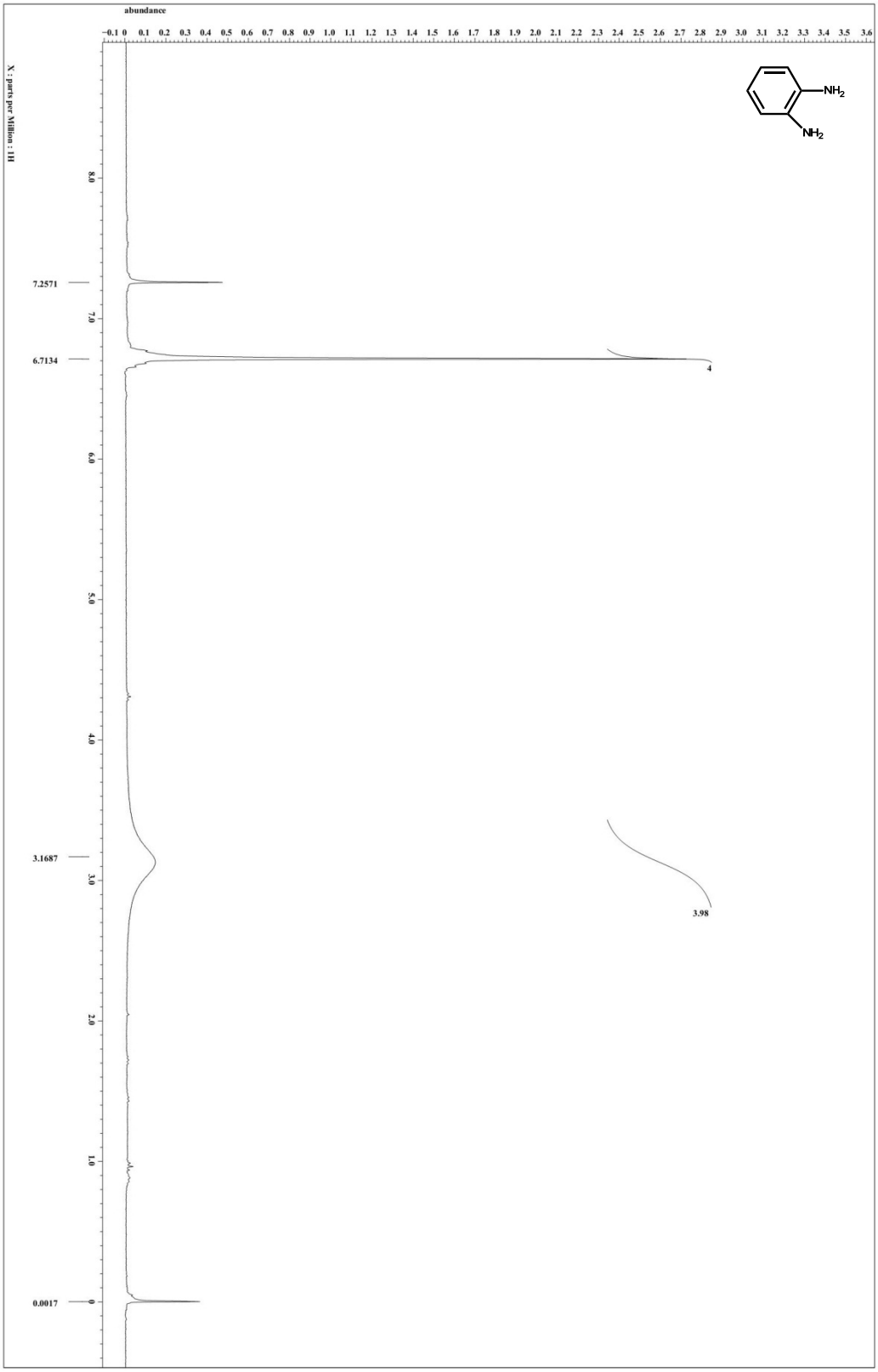
Formula : C8H9NO CAS:99-92-3 F.W:135

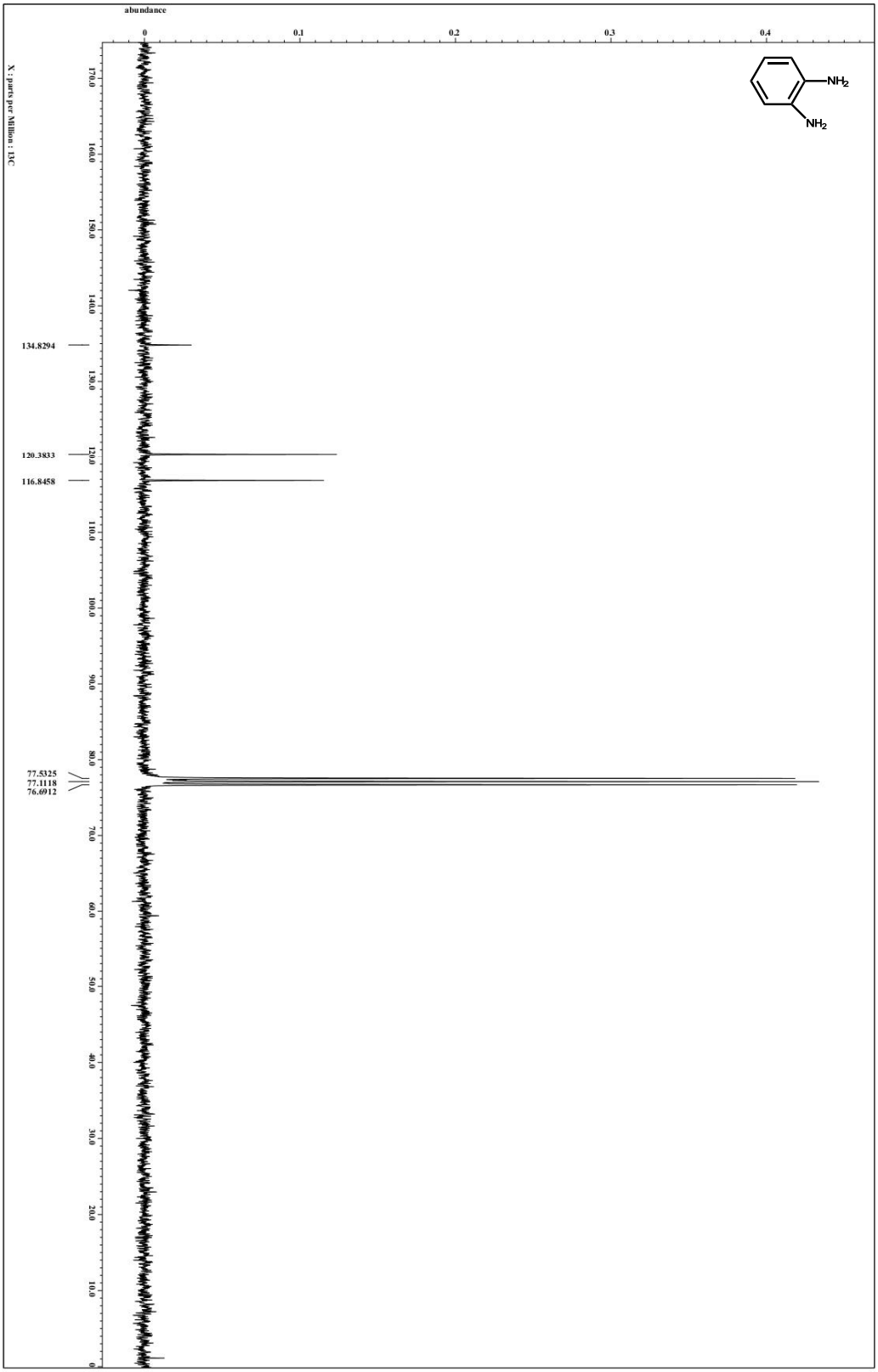
Component:Acetophenone, 4'-amino- $$ Ethanone, 1-(4-aminophenyl)- $$ p-Acetylaniline $$ p-Aminoacetophenone $$ p-Aminoacetylbenzene $$ 4-Acetylaniline $$ 4'-Aminoacetophenone $$ 1-(4-Aminophenyl)ethanone $$ 4-Aminoacetophenone $$ Acetophenone, p-amino- $$ p-Aminoacetofenonu $$ usaf ek-631 $$ Ethanone,1-(4-aminophenyl)- $$ p-Amino acetophenone $$ Acetophenone, p-amino-, $$



No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength
1	14.00	0.40	14	45.00	1.20	27	66.00	5.20	40	93.00	4.00
2	15.00	2.00	15	46.00	3.20	28	67.00	0.40	41	104.00	0.40
3	26.00	0.40	16	50.00	2.40	29	74.00	0.80	42	106.00	2.40
4	27.00	1.20	17	51.00	2.80	30	75.00	0.80	43	117.00	0.40
5	28.00	2.00	18	52.00	4.40	31	76.00	0.80	44	118.00	0.40
6	37.00	1.20	19	53.00	2.00	32	77.00	2.80	45	119.00	0.80
7	38.00	3.60	20	54.00	1.20	33	78.00	0.80	46	120.00	100.00
8	39.00	12.00	21	60.00	2.00	34	79.00	1.60	47	121.00	8.40
9	40.00	1.20	22	61.00	1.20	35	80.00	0.40	48	122.00	0.80
10	41.00	4.00	23	62.00	2.40	36	89.00	0.80	49	135.00	48.00
11	42.00	1.20	24	63.00	6.00	37	90.00	0.80	50	136.00	4.40
12	43.00	7.20	25	64.00	4.80	38	91.00	3.60			
13	44.00	0.40	26	65.00	34.40	39	92.00	48.40			

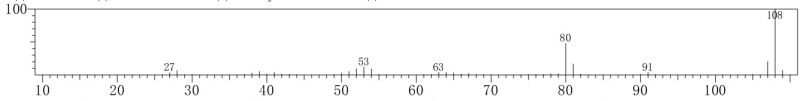




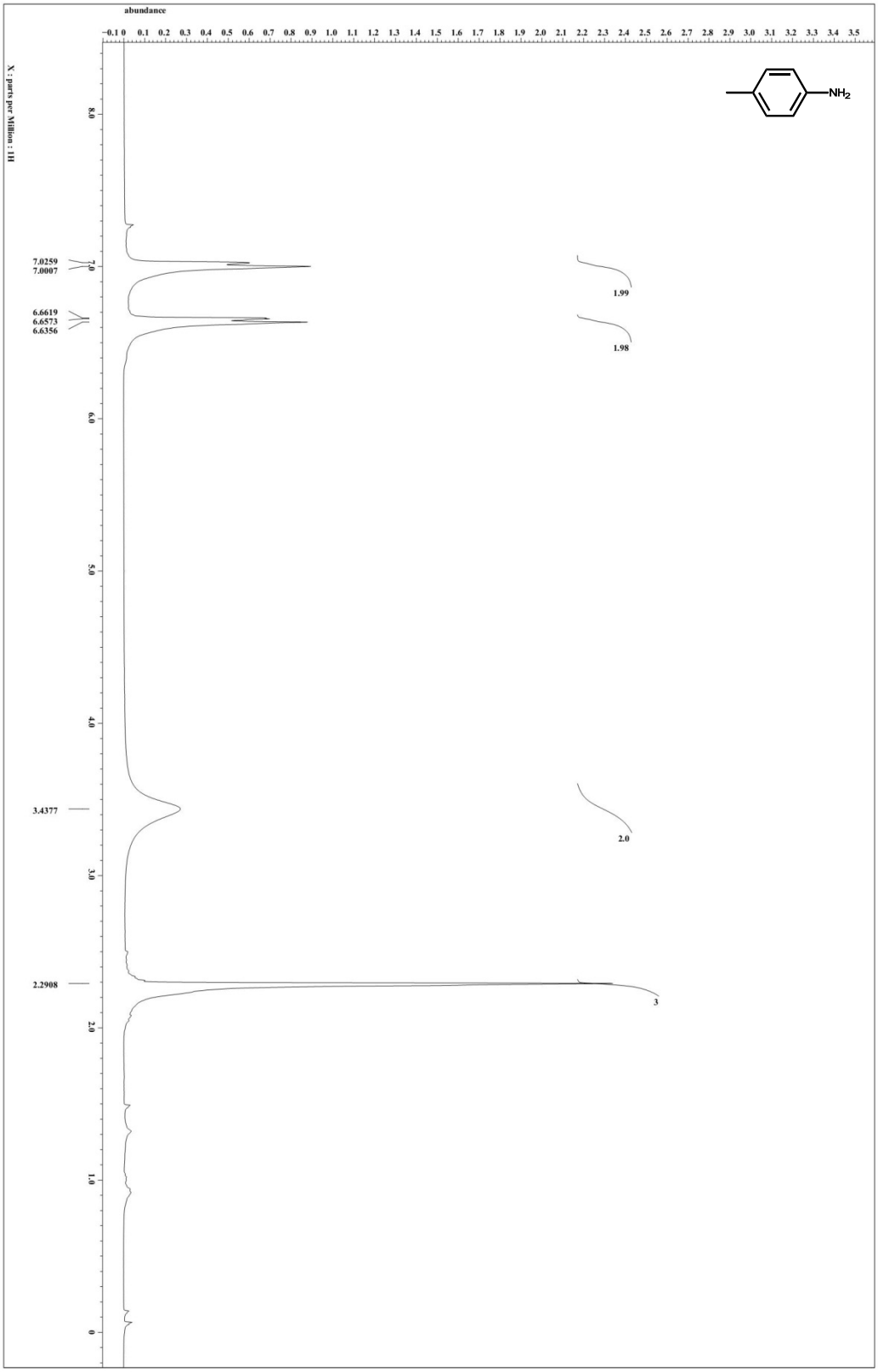


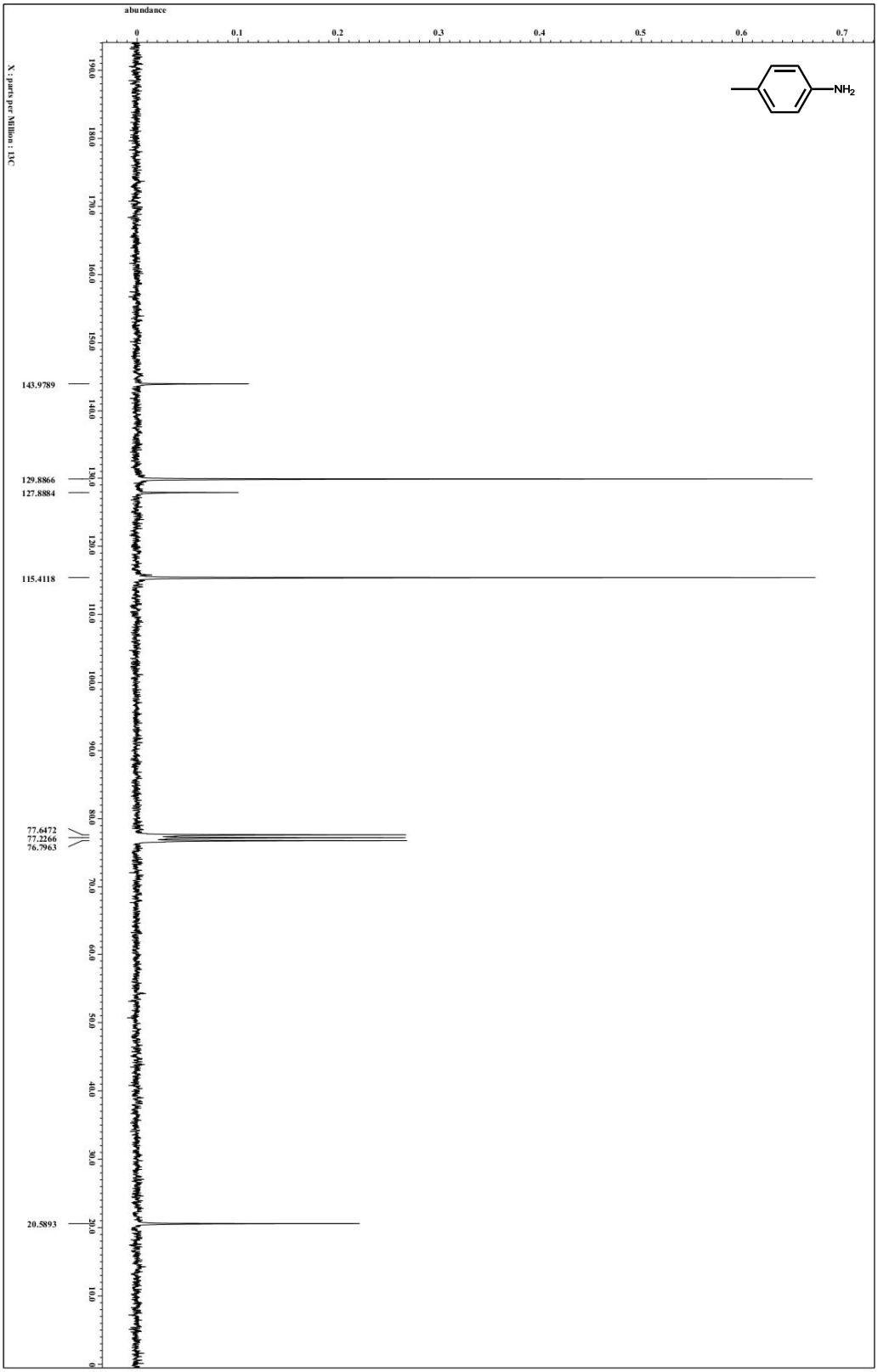
Formula : C6H8N2 CAS:95-54-5 **F.W.** : 108

Component : 1,2-Benzenediamine $$ o-Phenylenediamine $$ o-Benzenediamine $$ o-Diaminobenzene $$ C.I. Oxidation Base 16 $$ C.I. 76010 $$ Orthamine $$ 1,2-Diaminobenzene $$ 1,2-Phenylenediamine $$ 2-Aminoaniline $$ o-Aminoaniline $$ EK 1700 $$ OPDA $$ PODA $$ SQ 15500 $$ o-Fenylendiamin $$ 1,2-Fenylendiamin $$ NSC 5354 $$ UN 1673 $$ Octolite 544 $$ Phenylenediamine $$

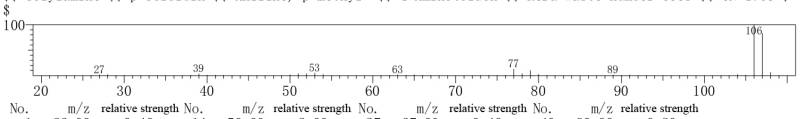


No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength
1	15.00	0.40	14	44.00	0.40	27	65.00	3.20	40	82.00	1.60
2	26.00	0.80	15	49.00	0.80	28	66.00	1.60	41	89.00	0.20
3	27.00	3.60	16	50.00	2.80	29	67.00	2.40	42	90.00	1.20
4	28.00	6.80	17	51.00	5.20	30	68.00	0.40	43	91.00	4.00
5	29.00	0.80	18	52.00	9.60	31	69.00	0.40	44	92.00	0.80
6	30.00	0.80	19	53.00	12.40	32	74.00	0.40	45	105.00	1.20
7	37.00	1.20	20	54.00	9.20	33	75.00	0.80	46	106.00	0.40
8	38.00	2.80	21	55.00	1.20	34	76.00	1.20	47	107.00	20.40
9	39.00	5.60	22	56.00	0.80	35	77.00	0.80	48	108.00	100.00
10	40.00	1.60	23	61.00	0.80	36	78.00	2.00	49	109.00	7.20
11	41.00	4.00	24	62.00	0.80	37	79.00	2.00	50	110.00	0.40
12	42.00	1.60	25	63.00	4.00	38	80.00	48.00			
13	43.00	1.20	26	64.00	4.00	39	81.00	16.80			

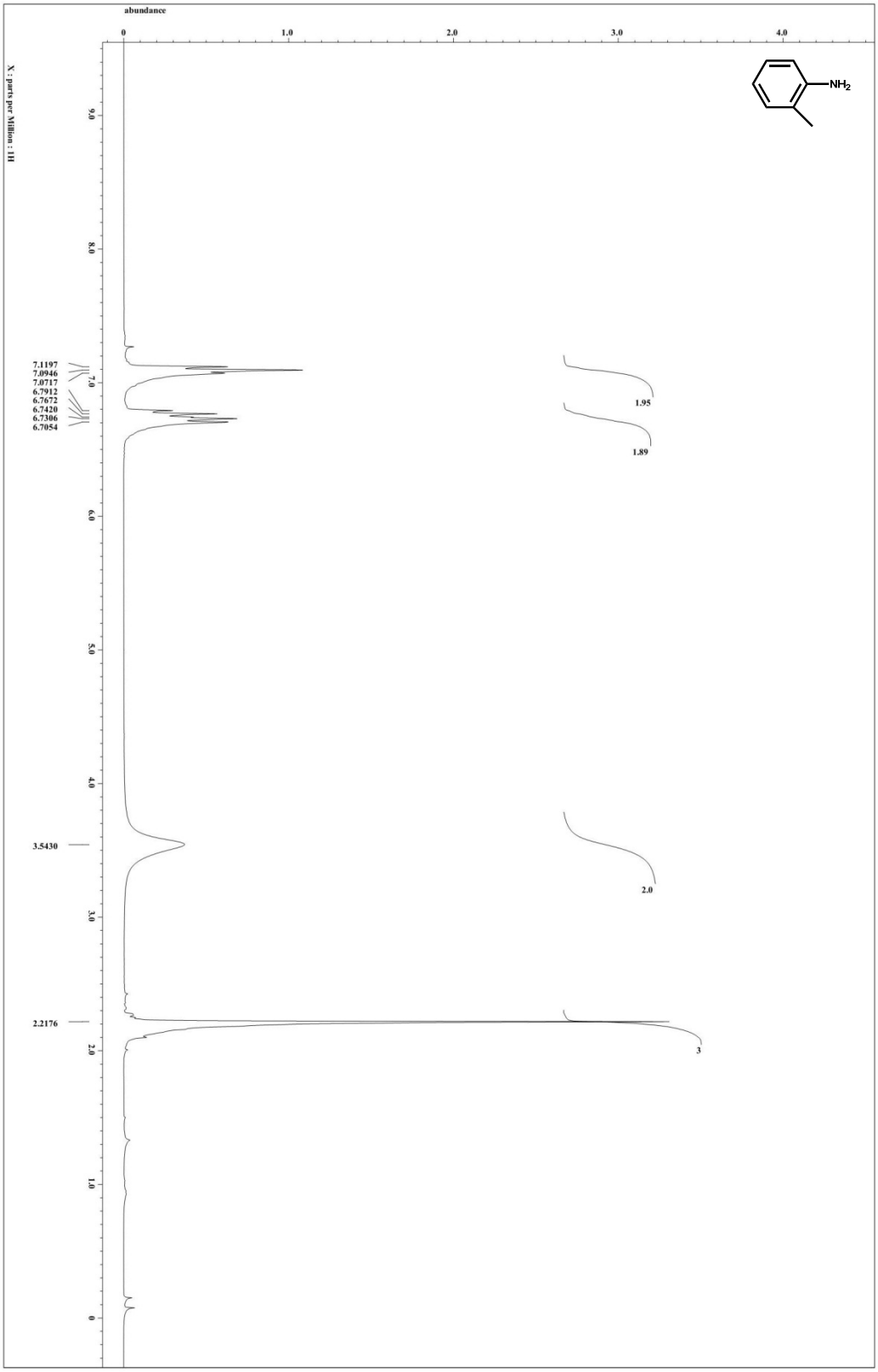


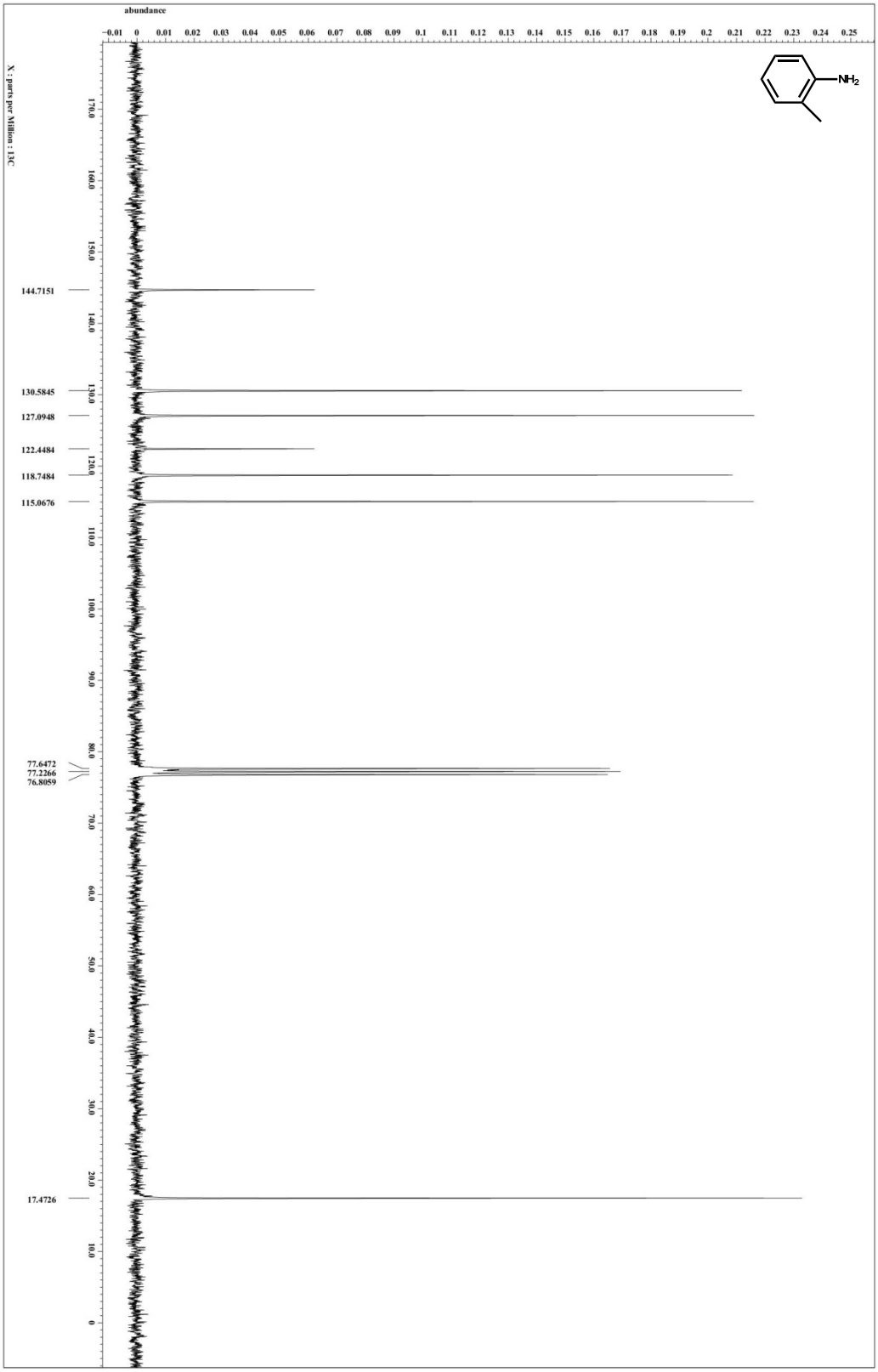


Formula: C7H9N CAS:106-49-0 F.W.:107
Component: p-Aminotoluene $$ Benzenamine, 4-methyl- $$ p-Toluidine $$ p-Methylaniline $$ p-Methylbenzenamine $$ p-Tolylamine $$ c.i. Azoic coupling component 107 $$ 1-Amino-4-methylbenzene $$ 4-Aminotoluene $$ 4-Methylaniline $$ 4-Methylbenzenamine $$ 4-Toluidine $$ Benzenamine, 4-methyl- $$ 4-Amino-1-methylbenzene $$ Tolylamine $$ p-Toluidin $$ Aniline, p-methyl- $$ 4-Aminotoluen $$ Rcra waste number U353 $$ UN 1708 $$

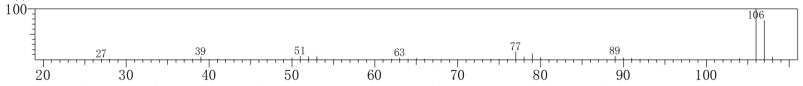


No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength
1	26.00	0.40	14	50.00	2.00	27	67.00	0.40	40	90.00	0.80
2	27.00	2.00	15	51.00	4.00	28	68.00	0.20	41	91.00	1.60
3	28.00	2.40	16	52.00	4.00	29	73.00	0.20	42	92.00	0.40
4	29.00	0.40	17	53.00	5.20	30	74.00	0.40	43	93.00	0.20
5	30.00	0.80	18	54.00	2.40	31	75.00	0.40	44	102.00	0.20
6	37.00	0.40	19	55.00	0.40	32	76.00	0.80	45	104.00	2.40
7	38.00	0.80	20	56.00	0.20	33	77.00	12.80	46	105.00	1.20
8	39.00	3.60	21	61.00	0.40	34	78.00	4.00	47	106.00	100.00
9	40.00	0.80	22	62.00	0.80	35	79.00	10.40	48	107.00	83.20
10	41.00	1.20	23	63.00	2.00	36	80.00	2.80	49	108.00	6.40
11	42.00	0.80	24	64.00	0.80	37	81.00	0.40	50	109.00	0.40
12	43.00	0.20	25	65.00	2.00	38	86.00	0.20			
13	49.00	0.40	26	66.00	0.80	39	89.00	1.60			

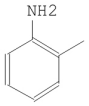


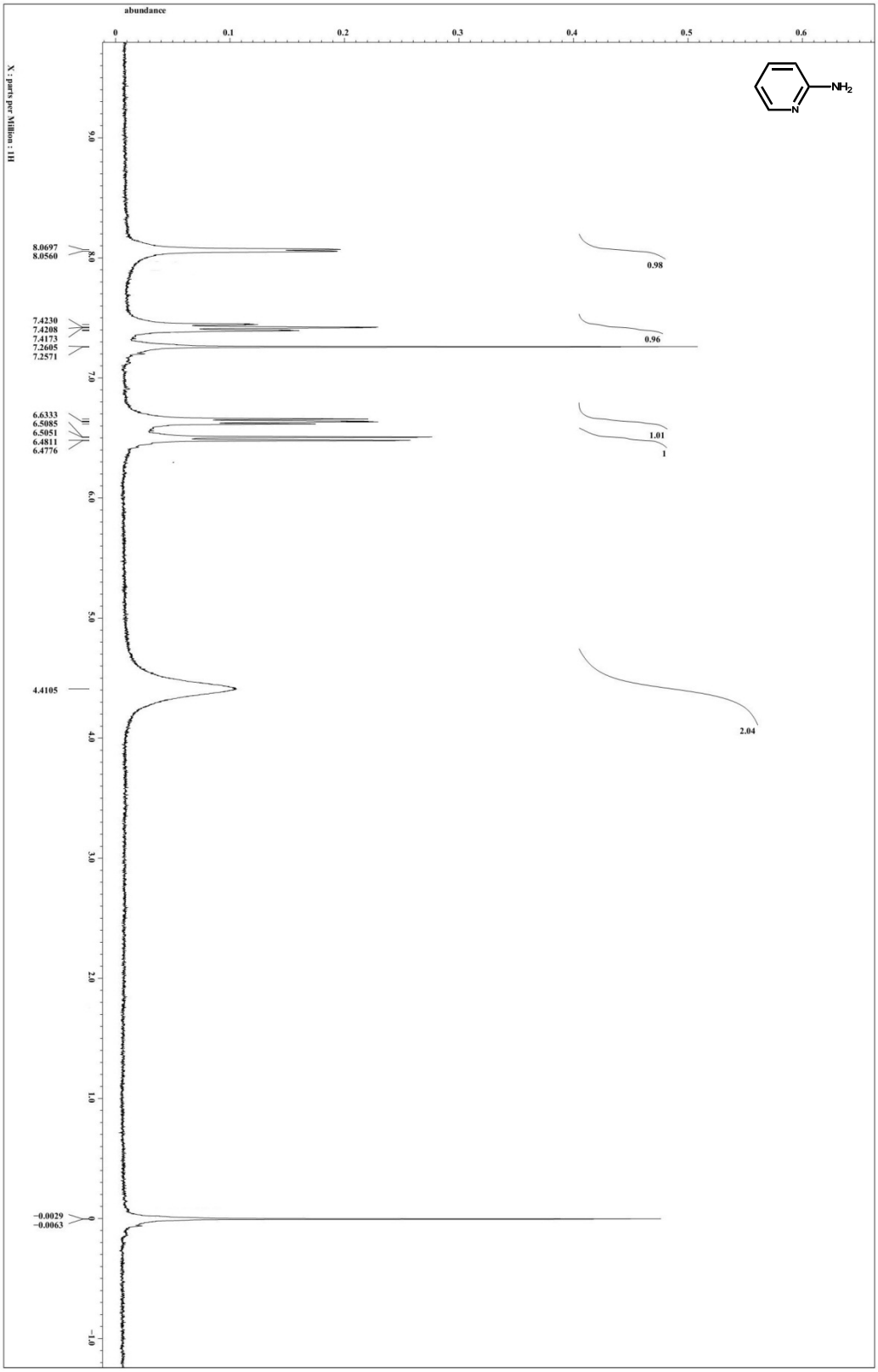


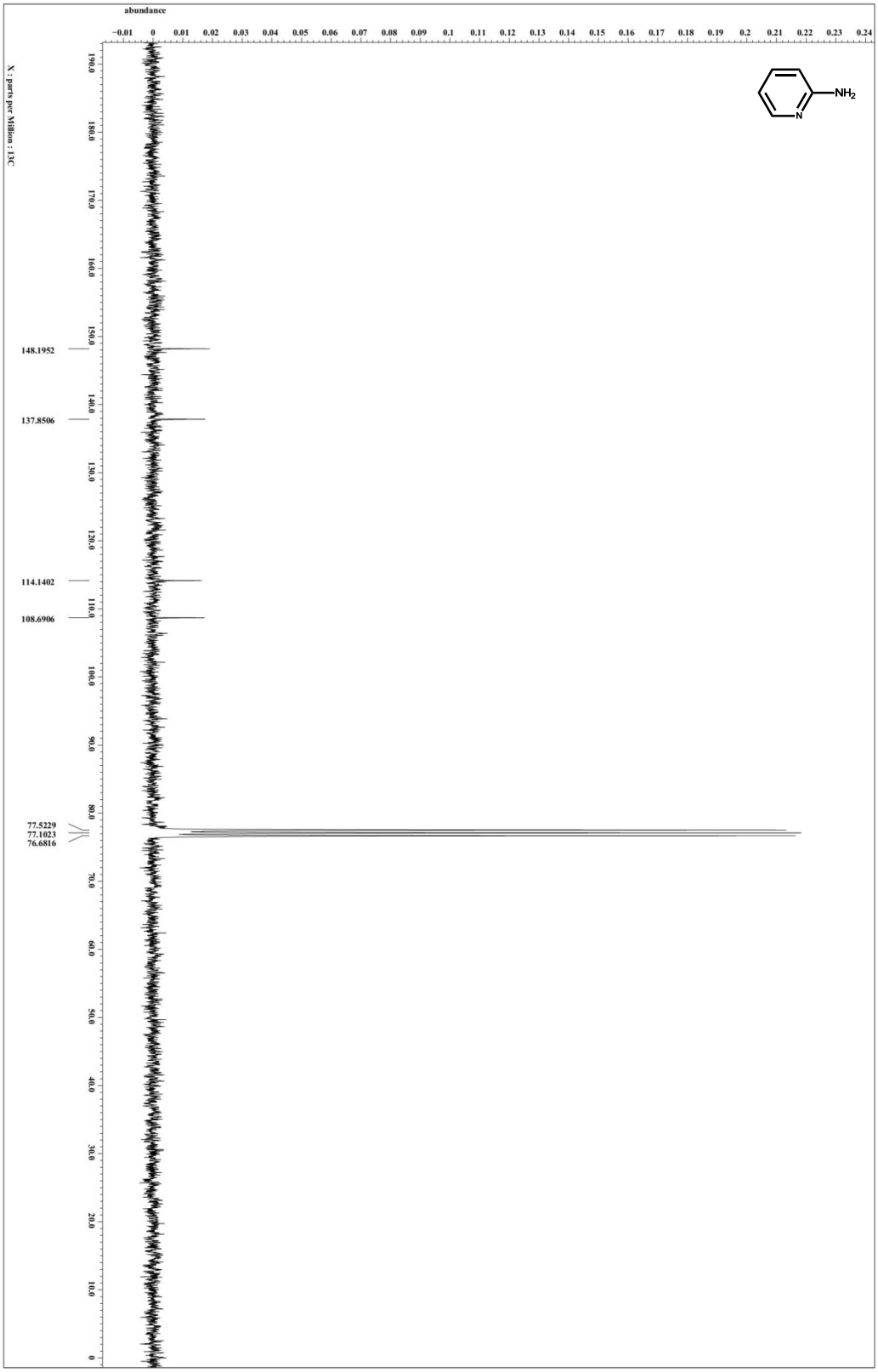
Formula : C7H9N CAS:95-53-4 F.W. : 107
Component: o-Toluidine $$ Benzenamine, 2-methyl- $$ o-Aminotoluene $$ o-Methylaniline $$ o-Methylbenzenamine $$ o-Tolylamine $$ 1-Amino-2-methylbenzene $$ 2-Aminotoluene $$ 2-Methyl-1-aminobenzene $$ 2-Methylaniline $$ 2-Methylbenzenamine $$ 2-Toluidine $$ 2-Amino-1-methylbenzene $$ 1-Methyl-2-aminobenzene $$ o-Toluide $$ o-Toluidin $$ o-Toluidyna $$ Aniline, 2-methyl- $$ C.I. 37077 $$ Rcra waste number U328 $$ UN 1708 $$



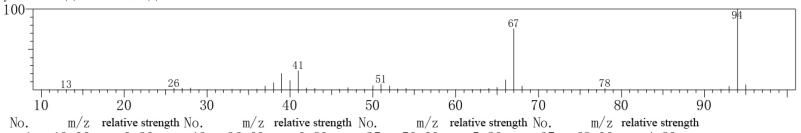
No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength
1	26.00	0.40	14	50.00	4.00	27	68.00	0.40	40	89.00	6.80
2	27.00	2.00	15	51.00	7.20	28	73.00	0.40	41	90.00	4.00
3	28.00	1.60	16	52.00	6.80	29	74.00	1.20	42	91.00	3.20
4	29.00	0.40	17	53.00	6.40	30	75.00	0.80	43	92.00	0.80
5	30.00	0.80	18	55.00	0.40	31	76.00	1.20	44	93.00	0.20
6	37.00	0.80	19	56.00	0.20	32	77.00	16.00	45	102.00	0.40
7	38.00	1.60	20	61.00	0.80	33	78.00	6.00	46	104.00	2.80
8	39.00	5.60	21	62.00	1.60	34	79.00	12.00	47	106.00	100.00
9	40.00	1.20	22	63.00	3.60	35	80.00	5.20	48	107.00	77.60
10	41.00	1.60	23	64.00	1.60	36	81.00	0.80	49	108.00	6.00
11	42.00	1.20	24	65.00	3.20	37	85.00	0.20	50	109.00	0.40
12	43.00	0.20	25	66.00	1.60	38	86.00	0.40			
13	49.00	0.40	26	67.00	0.80	39	87.00	0.40			



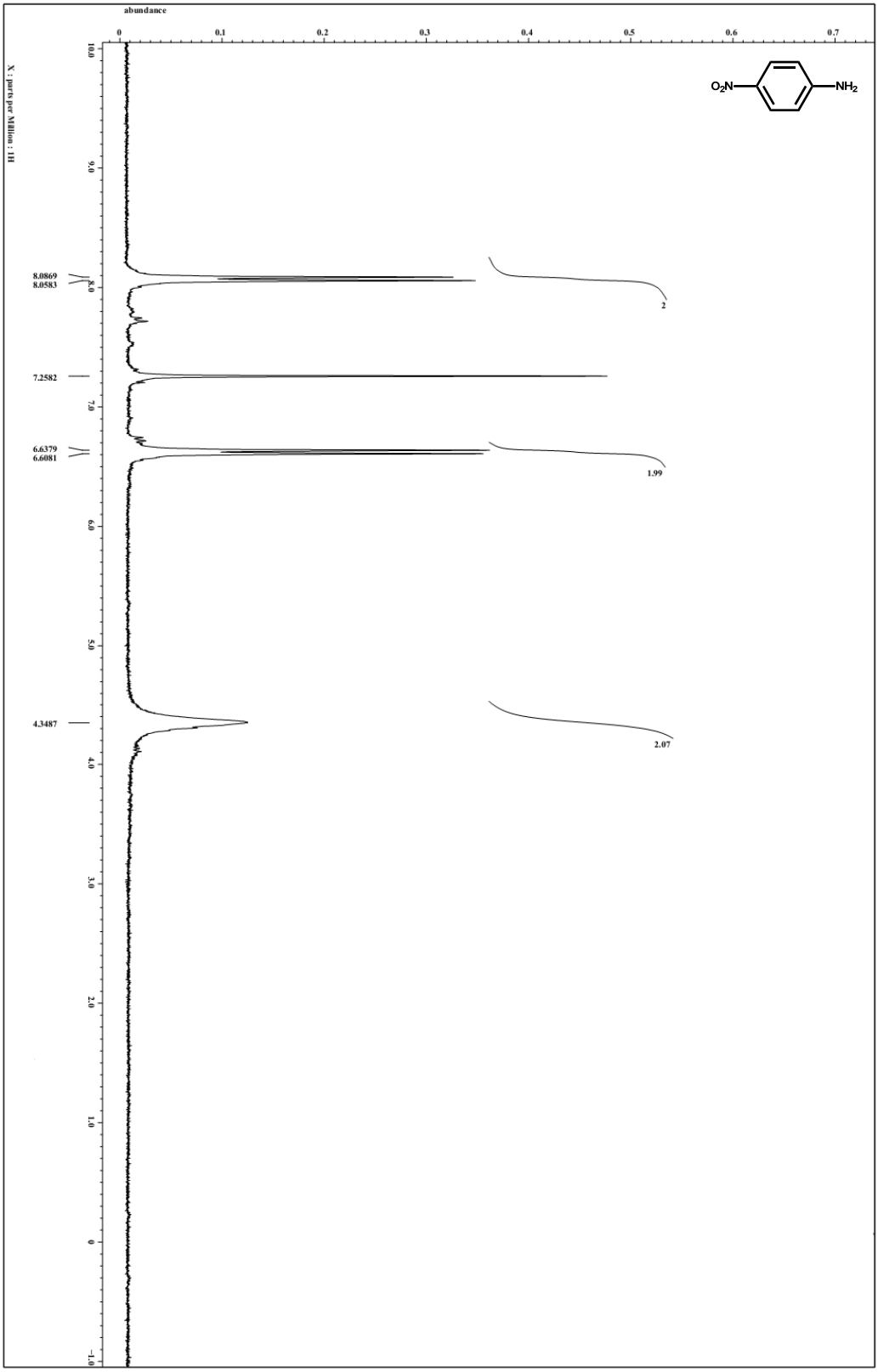


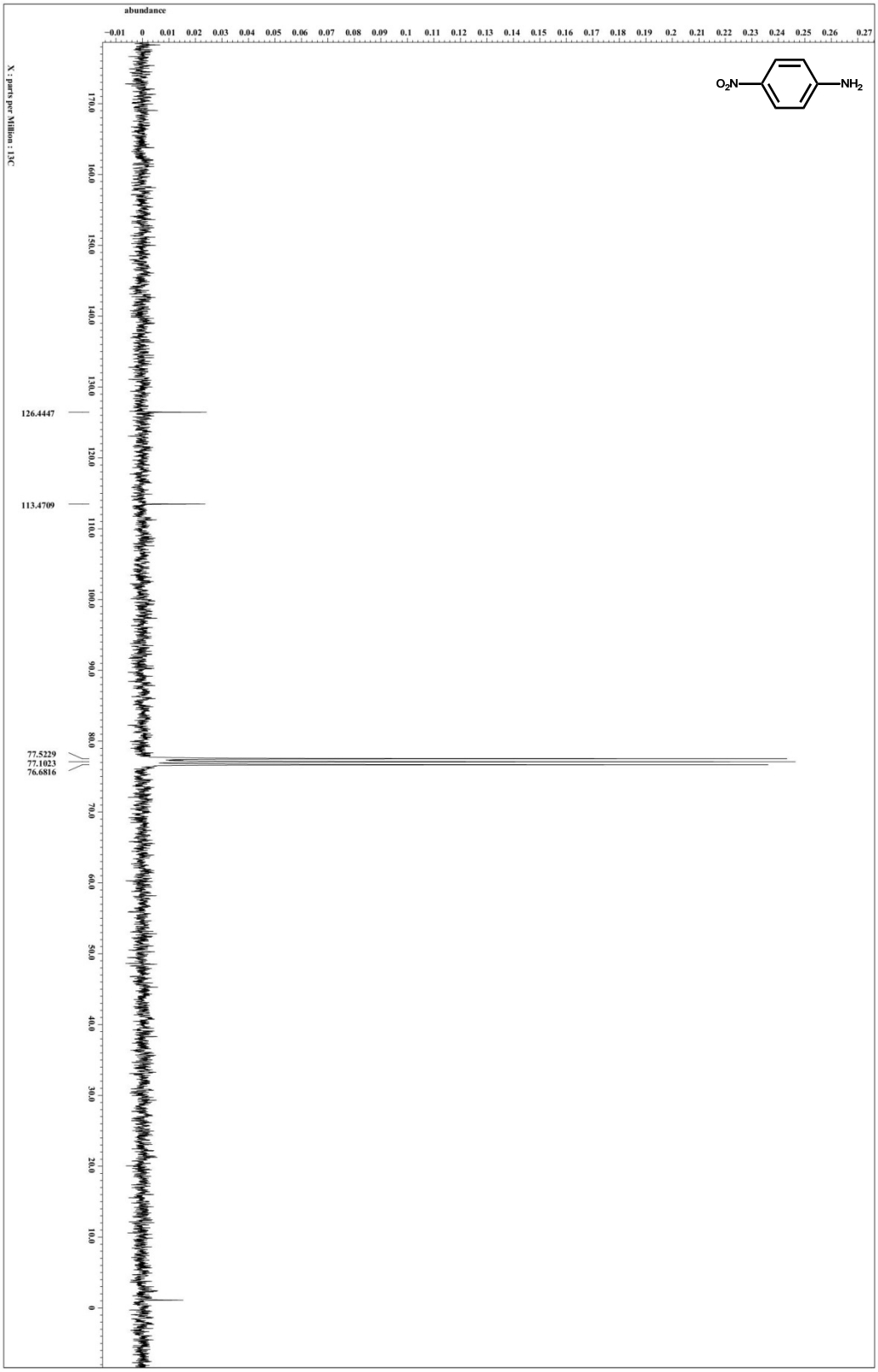


Formula: C5H6N2 CAS:504-29-0 F.W.:94
Component: 2-Aminopyridine $$ 2-Pyridinamine $$ Pyridine, 2-amino- $$ .alpha.-Aminopyridine $$ .alpha.-Pyridinamine $$ .alpha.-Pyridylamine $$ .beta.-Pyridylamine $$ o-Aminopyridine $$ 2-Pyridylamine $$ Amino-2 pyridine $$ UN 2671 $$



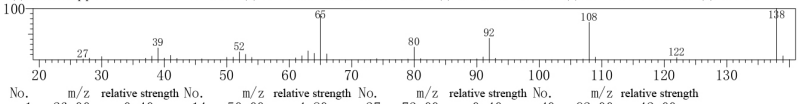
No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength
1	13.00	0.20	13	36.00	0.80	25	50.00	5.20	37	68.00	4.80
2	14.00	0.40	14	37.00	4.80	26	51.00	7.20	38	69.00	0.20
3	15.00	0.40	15	38.00	8.80	27	52.00	4.80	39	75.00	0.40
4	24.00	0.20	16	39.00	20.40	28	53.00	1.20	40	76.00	0.80
5	25.00	0.40	17	40.00	11.60	29	54.00	2.00	41	77.00	0.40
6	26.00	2.00	18	41.00	23.60	30	55.00	0.40	42	78.00	1.60
7	27.00	2.00	19	42.00	2.40	31	62.00	0.40	43	79.00	0.40
8	28.00	2.40	20	43.00	2.00	32	63.00	0.80	44	92.00	0.80
9	29.00	0.40	21	46.00	0.80	33	64.00	2.00	45	93.00	4.40
10	30.00	0.40	22	47.00	2.80	34	65.00	3.20	46	94.00	100.00
11	33.00	0.80	23	48.00	0.40	35	66.00	12.40	47	95.00	6.40
12	34.00	0.40	24	49.00	0.80	36	67.00	75.60	48	96.00	0.40



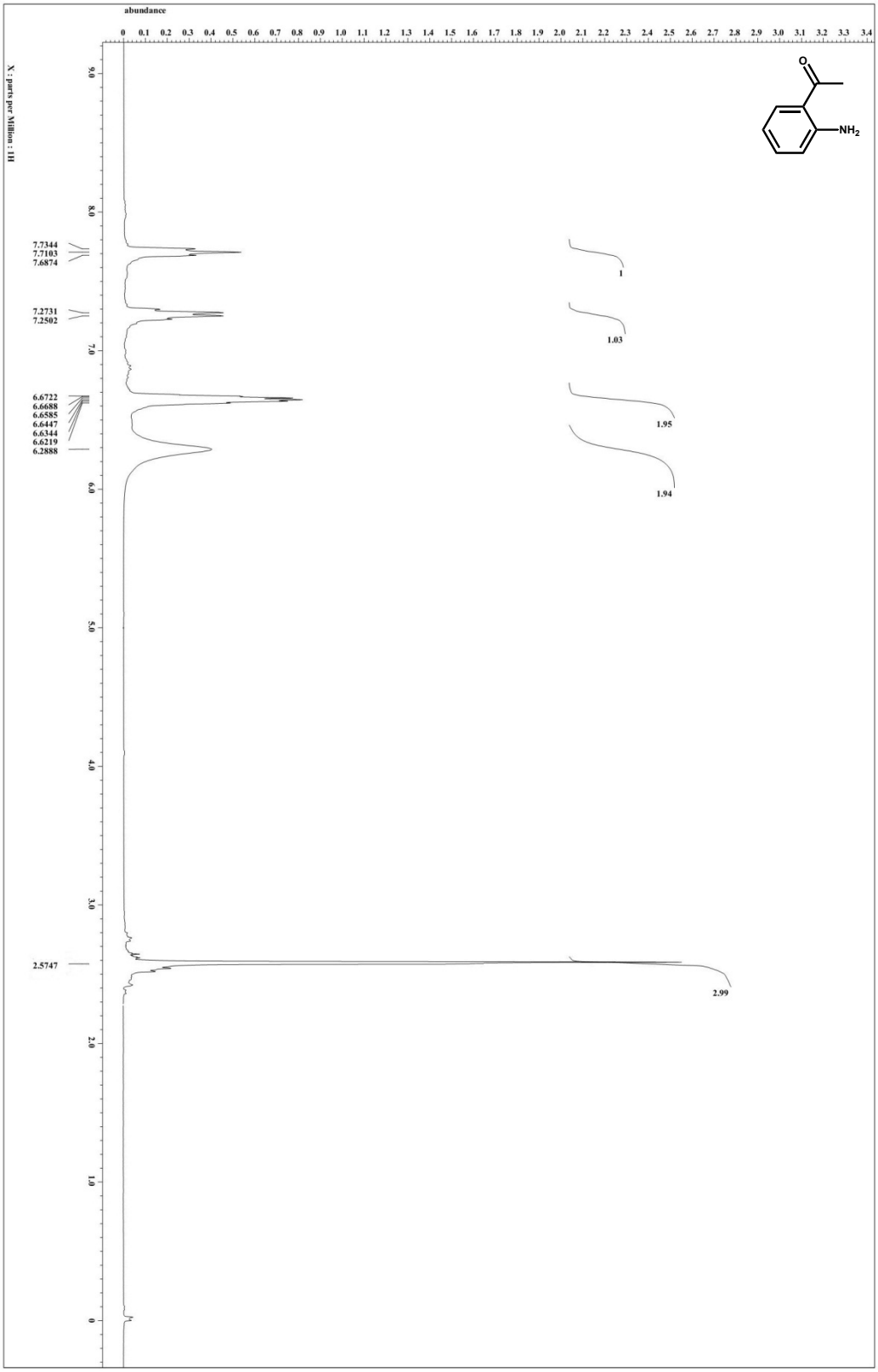


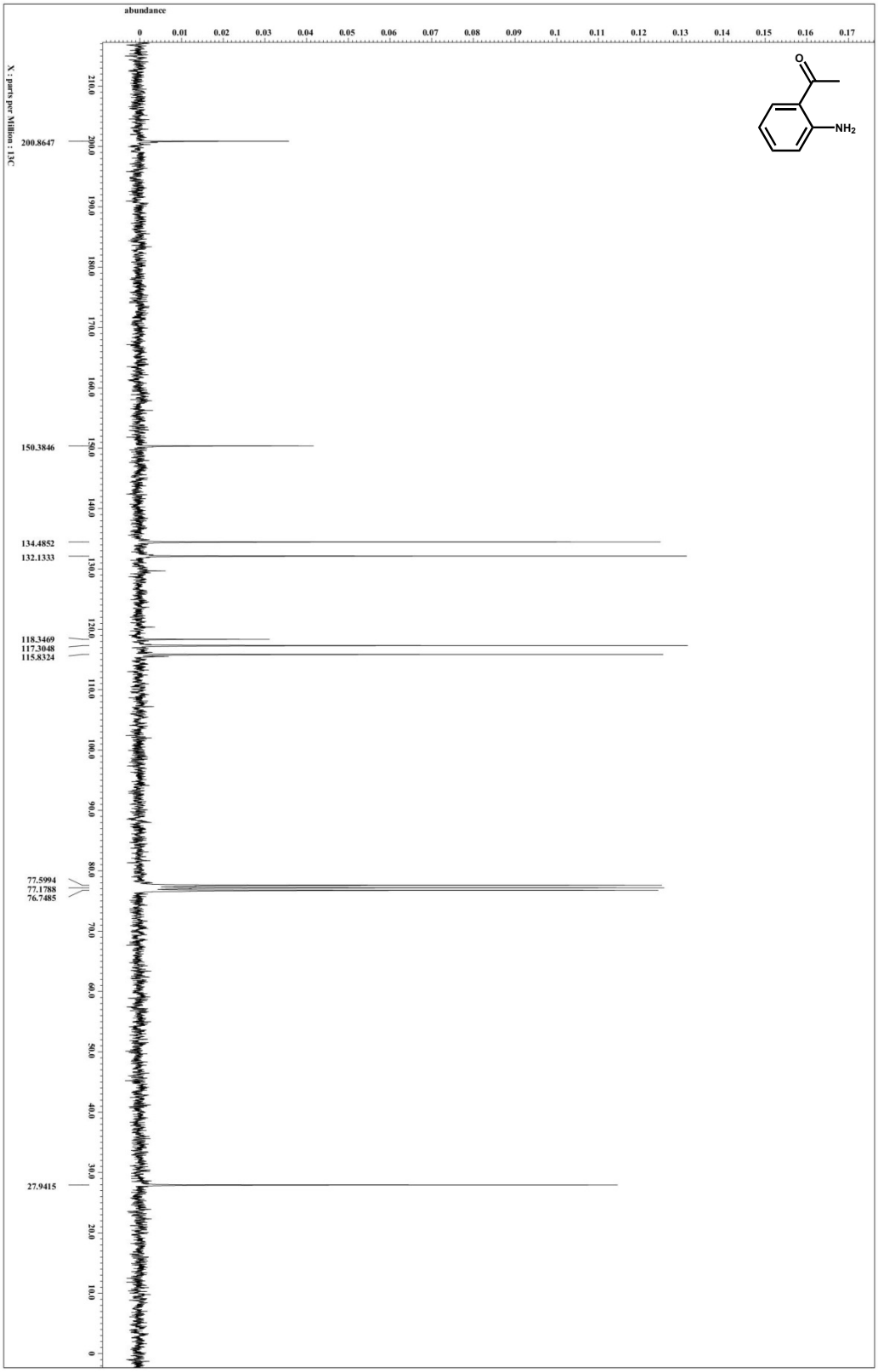
Formula: C6H6N2O2 CAS:100-01-6 F.W.:138

Component: p-Nitroaniline $$ Benzenamine, 4-nitro- $$ Aniline, p-nitro- $$ p-Aminonitrobenzene $$ p-Nitrophenylamine $$ Azoamine Red Zh $$ C.I. Azoic Diazo Component 37 $$ C.I. Developer 17 $$ C.I. 37035 $$ Developer P $$ Devol Red GG $$ Fast Red Base GG $$ Fast Red Base 2J $$ Fast Red GG Base $$ Fast Red MP Base $$ Fast Red P Base $$ Fast Red 2G Base $$ Naphtoelan Red GG Base $$ Nitrazol CF extra $$ PNA $$ Red 2G Base $$ Shinnippon Fast Red GG Base $$ 1-Amino-4-nitrobenzene $$ 4-Nitraniline $$ 4-Nitroaniline $$ 4-Ni

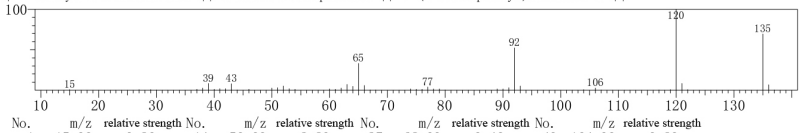


No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength
1	26.00	0.40	14	50.00	4.80	27	73.00	0.40	40	92.00	42.00
2	27.00	1.60	15	51.00	5.20	28	74.00	2.40	41	93.00	3.20
3	28.00	3.60	16	52.00	15.60	29	75.00	0.80	42	105.00	0.40
4	29.00	0.40	17	53.00	10.80	30	76.00	0.40	43	106.00	0.40
5	30.00	6.40	18	54.00	4.80	31	77.00	0.40	44	107.00	1.60
6	37.00	3.20	19	60.00	0.40	32	78.00	0.40	45	108.00	73.20
7	38.00	7.20	20	61.00	4.00	33	79.00	1.60	46	109.00	5.20
8	39.00	23.20	21	62.00	8.00	34	80.00	24.80	47	122.00	4.40
9	40.00	3.60	22	63.00	17.60	35	81.00	2.40	48	138.00	100.00
10	41.00	8.80	23	64.00	12.80	36	88.00	0.40	49	139.00	7.60
11	42.00	2.80	24	65.00	88.80	37	89.00	0.40	50	140.00	0.40
12	44.00	0.40	25	66.00	11.60	38	90.00	2.00			
13	46.00	2.00	26	67.00	0.40	39	91.00	5.60			

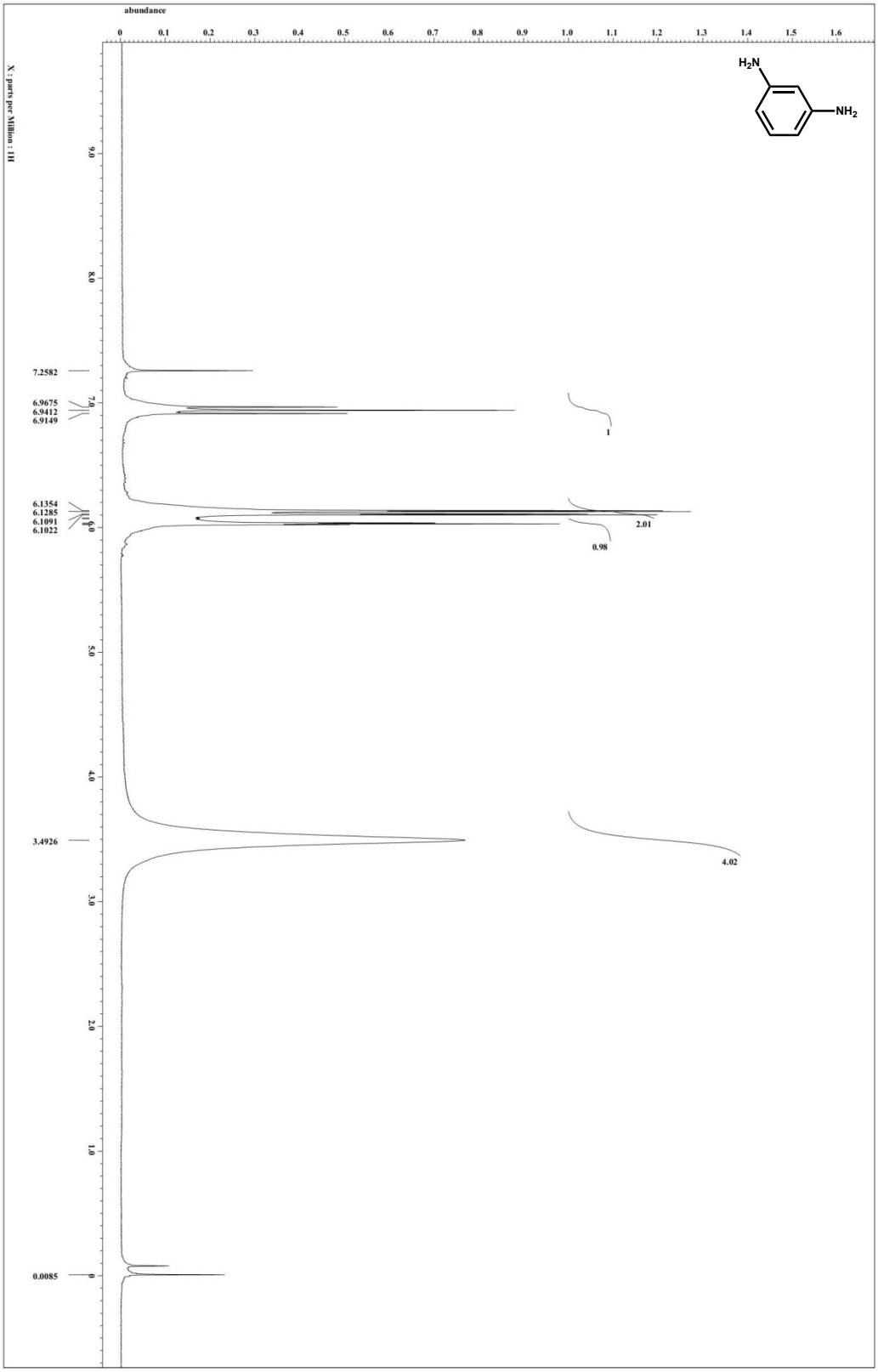


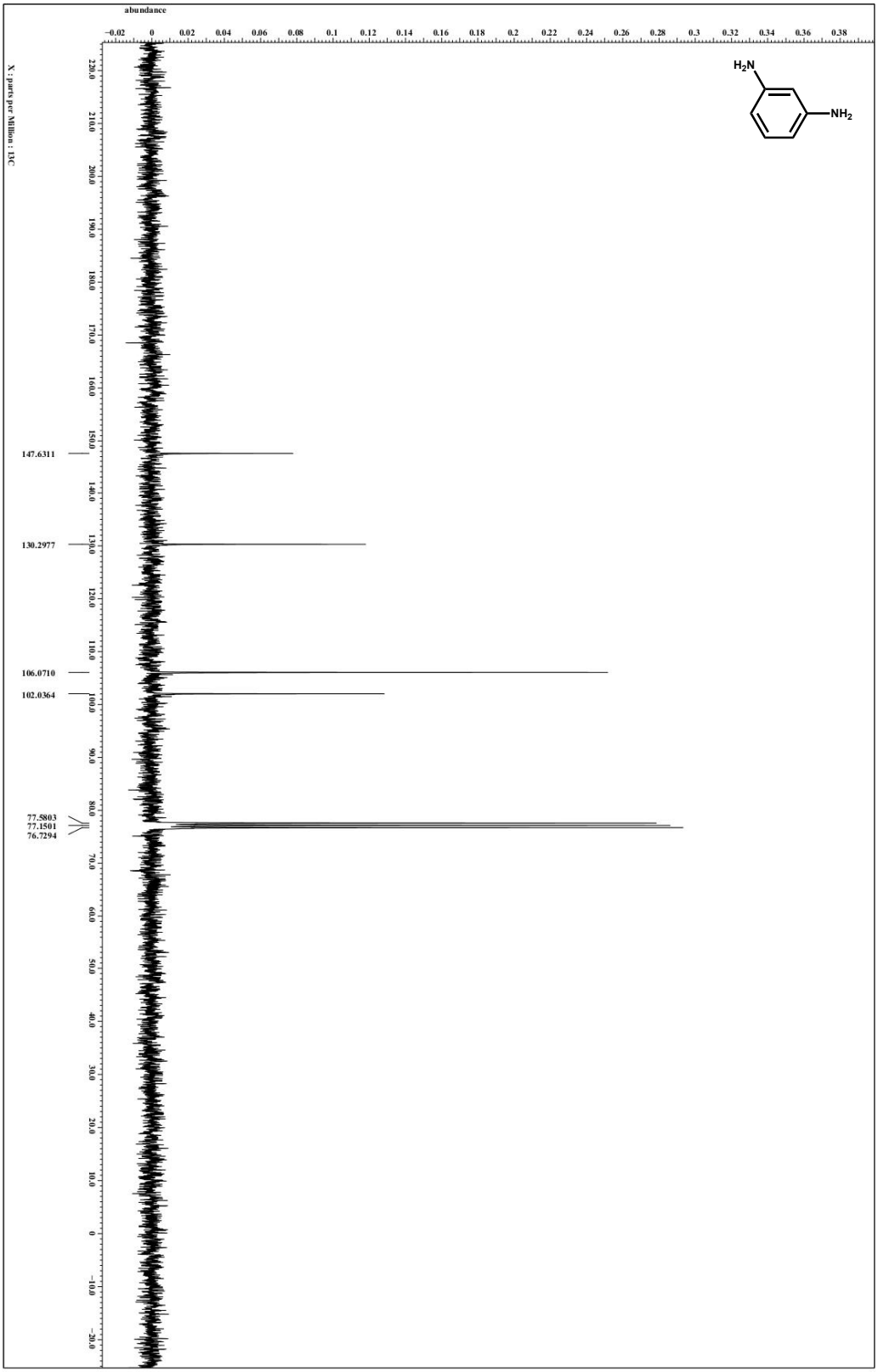


Formula: C8H9NO CAS:551-93-9 F.W.:135
Component: Ethanone, 1-(2-aminophenyl)- $$ Acetophenone, 2'-amino- $$ o-Aminoacetophenone $$ o-Aminoacetylbenzene $$ 2-Acetylaniline $$ 2'-Aminoacetophenone $$ 2-Aminoacetophenone $$ o-Aminophenyl methyl ketone $$ 1-Acetyl-2-aminobenzene $$ o-Amino acetophenone $$ 1-(2-Aminophenyl)ethanone # $$



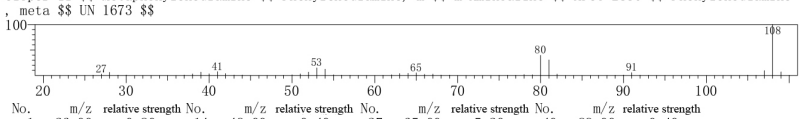
No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength
1	15.00	0.80	14	50.00	2.80	27	68.00	0.40	40	104.00	0.80
2	27.00	0.80	15	51.00	3.20	28	74.00	1.60	41	106.00	2.80
3	29.00	0.80	16	52.00	5.20	29	75.00	1.20	42	107.00	0.40
4	30.00	0.40	17	53.00	2.00	30	76.00	1.20	43	117.00	0.40
5	37.00	1.20	18	54.00	1.20	31	77.00	4.00	44	119.00	0.80
6	38.00	2.80	19	60.00	1.60	32	78.00	1.60	45	120.00	100.00
7	39.00	8.40	20	61.00	1.20	33	79.00	1.60	46	121.00	8.40
8	40.00	1.20	21	62.00	2.80	34	80.00	0.40	47	122.00	0.80
9	41.00	2.00	22	63.00	7.20	35	89.00	1.60	48	135.00	69.60
10	42.00	2.00	23	64.00	4.80	36	90.00	1.60	49	136.00	6.80
11	43.00	8.00	24	65.00	33.20	37	91.00	3.20	50	137.00	0.40
12	44.00	0.40	25	66.00	6.00	38	92.00	52.40			
13	46.00	1.20	26	67.00	0.40	39	93.00	5.20			





Formula: C6H8N2 CAS:108-45-2 F.W.:108

Component: 1,3-Benzenediamine $$ m-Phenylenediamine $$ m-Aminoaniline $$ m-Benzenediamine $$ m-Diaminobenzene $$ C.I. Developer 11 $$ Developer C $$ Developer H $$ Developer M $$ Direct Brown BR $$ Direct Brown GG $$ 1,3-Diaminobenzene $$ 1,3-Phenylenediamine $$ 3-Aminoaniline $$ m-Fenylendiamin $$ C.I. 76025 $$ Developer 11 $$ Metaphenylenediamine $$ Phenylenediamine, m $$ m-Aminoaline $$ APCO 2330 $$ Phenylenediamine, meta $$ UN 1673 $$



No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength	No.	m/z	relative strength
1	26.00	0.80	14	49.00	0.40	27	65.00	5.20	40	89.00	0.40
2	27.00	2.80	15	50.00	1.60	28	66.00	2.40	41	90.00	1.20
3	28.00	6.40	16	51.00	3.20	29	67.00	2.80	42	91.00	5.60
4	29.00	0.80	17	52.00	6.80	30	68.00	1.20	43	92.00	0.80
5	30.00	1.20	18	53.00	15.20	31	69.00	0.80	44	93.00	0.40
6	37.00	1.20	19	54.00	12.40	32	75.00	0.40	45	105.00	0.80
7	38.00	3.20	20	55.00	1.60	33	76.00	0.40	46	106.00	0.40
8	39.00	6.80	21	56.00	0.80	34	77.00	0.40	47	107.00	9.60
9	40.00	3.60	22	57.00	0.40	35	78.00	2.00	48	108.00	100.00
10	41.00	7.60	23	61.00	0.40	36	79.00	1.60	49	109.00	7.20
11	42.00	4.00	24	62.00	1.60	37	80.00	39.60	50	110.00	0.40
12	43.00	1.20	25	63.00	4.00	38	81.00	30.80			
13	44.00	1.20	26	64.00	4.40	39	82.00	2.80