

Catalytic co-pyrolysis of waste pista nutshells and polystyrene: optimisation of parameters, and catalysts loading on the products yield and composition

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Table S1. The most important studies were performed on the co-pyrolysis of biomass and plastics, and their findings.

Feedstocks (Biomass/Plastic)	Pyrolysis reactor and catalysts	Results	References
Pine wood and HDPE	Reactor: Double column Temperature: 450, 500, and 550 °C, Pine/HDPE ratio: 0/100, 25/75, 50/50, 75/25, and 100/0. Catalyst: ZSM-5	Individual pyrolysis of pine and HDPE yielded 26.30% and 31 wt.% pyrolysis oil, with selectivities of 69.30% and 90%, respectively. Furthermore, the addition of HDPE to pine yields gasoline selectivity by increasing the hydrogen-to-carbon ratio to 25:75 at 500 °C.	¹⁸
Poplar wood/PVC and PS	Fixed bed	The gas yield decreased, while the pyrolysis oil yield remained unchanged. Further, compared to the pyrolysis of individual biomass, the biochar production from catalytic pyrolysis increased. In the case of PS, the yield of gas and biochar dropped, but the yield of oil increased due to the absence of plastic.	¹⁹
Wood pellets/HDPE, LDPE, PP, PS, and PET	Fixed bed and ZSM-5	The yield of syngas was increased by adding plastics to the biomass through co-pyrolysis-catalysis, exceeding the prediction by computation, indicating that there may have been an interaction between the plastic and the biomass.	²⁰

Oakwood/PP/PS	Fixed bed	The application of PP greatly enhanced the yield of pyrolysis oil and lowered the char yield. Additionally, it was discovered that the activation energy was slightly reduced when PP and oak wood were used together. Further, the char yield was reduced, and the oil yield was significantly increased using PS. Additionally, it was found that using a combination of PP and oak wood marginally reduced the activation energy.	²¹
Pine wood/waste nitrile gloves (WNG) and polystyrene (PS)	Fixed bed	Comparing the pyrolysis of biomass and plastics separately, the use of PS and WNG with biomass (NM) improved the yield and characteristics of pyrolysis oil. Moreover, the application of catalysts reduced the amount of char and raised the yield of pyrolysis oil.	²²
Bean crop residues/plastic mulching sheets (LDPE)	Fixed bed	Utilising LDPE combined with biomass improves feedstock characteristics, such as the amount of CP volatile ash, while lowering FC and HHV.	²³
Neem seeds and Waste nitrile gloves	Fixed bed, Al ₂ O ₃ and CaO	It was discovered that the yield of pyrolytic liquid during thermal co-pyrolysis was greater than that during catalytic co-pyrolysis. Catalysts increased the	²⁴

		carbon content of pyrolytic oil, acidity, and heating value while decreasing its oxygen concentration, density, and viscosity.	
Peanut shells and NRPE	Fixed bed and ZSM-5	ZSM-5 reduced the amount of char and improved the production of pyrolysis oil, as well as its characteristics. The pyrolytic oil evaluation results confirmed that adding NRPE and ZSM-5 decreased viscosity, acidity, and density while increasing ash content, heating value, and carbon content. Furthermore, it was discovered that the biochar results were noteworthy for use as carbon-based materials.	²⁵

*CP = Co-pyrolysis, FC = Fixed carbon, HHV = High heating value, LLDPE = Linear low-density polyethylene, PC = Polycarbonate, PE = Polyethylene, PP = Polypropylene, PS = Polystyrene, PVC = Polyvinyl chloride, CaO = Calcium oxide, Al₂O₃ = aluminium oxide, NM = need seeds, WNG = waste nitrile gloves

Table S2. GC-MS analysis of the pyrolytic oils produced at 550 °C.

Compound- Acids	
Sample-PNS	
Compounds Name	Area (%)
n-Hexadecanoic acid	2.56744
Octadecanoic acid	1.22343
Oleic Acid	1.03573
Hexadecanoic acid, 2-hydroxy-1-(hydroxymethyl)ethyl ester	0.32333
11-Dodecenoic acid	0.23928
Tetradecanoic acid	0.19965
Octadecanoic acid, 2,3-dihydroxypropyl ester	0.18168
9-Octadecenoic acid (Z)-, 2,3-dihydroxypropyl ester	0.13946
Propanoic acid, anhydride	0.13305
Pentanoic acid, 5-hydroxy-, 2,4-di-t-butylphenyl esters	0.12146
3,5-di-tert-Butyl-4-hydroxyphenylpropionic acid	0.11652
Phthalic acid, cyclobutyl isobutyl ester	0.10824
5-Acetyl-2H-pyrazole-3-carboxylic acid	0.1039
Carbamic acid, methyl-, 3-methylphenyl ester	0.08268
Diglycolic acid, di(pentafluorobenzyl) ester	0.07978
(Z)-15-Octadecenoic acid methyl ester	0.06971
Homovanillic acid	0.06811
Acetic acid ethenyl ester	0.06318
2-Propenoic acid, anhydride	0.0626
Xanthene-9-carboxylic acid	0.05651
Phthalic acid, di(2-propylpentyl) ester	0.05622
Phthalic acid, 6-ethyl-3-octyl butyl ester	0.05321
Cyclopentanecarboxylic acid, 2-fluorophenyl ester	0.05179
Adipic acid, di(2-phenylethyl) ester	0.04952
Phthalic acid, 4-bromophenyl ethyl ester	0.04599
2-Fluorobenzoic acid, 4-nitrophenyl ester	0.03395
Xanthene-9-carboxylic acid	0.0319
Z-2-Propenoic acid, 3-iodo-, methyl ester	0.03172
Phthalic acid, butyl 2-pentyl ester	0.03049
5-(Difluoromethyl)-2-methylpyrazole-3-carboxylic acid	0.03036
Succinic acid, 3-methylbut-2-en-1-yl diphenylmethyl ester	0.02721
Succinic acid, 3-chlorophenyl 4-methoxybenzyl ester	0.02681
Diglycolic acid, di(pentafluorobenzyl) ester	0.02546
1,3-Benzodioxole-5-(4-keto-butyric acid)	0.02413
Carbamic acid, N-(2-butyl)-N-hexyl-, propargyl ester	0.02337
Tetradecanoic acid, 10,13-dimethyl-, methyl ester	0.02214
2-Aminocaprylic acid, N-ethoxycarbonyl-, undecyl ester	0.02032
2-Propenoic acid, 3-phenyl-, 3-phenylpropyl ester	0.01955

Acetic acid, diphenyl-, ethyl ester	0.01488
Phenylacetic acid, 2-bromo-4-fluorophenyl ester	0.01437
2-Furancarboxylic acid, 2-propenyl ester	0.01425
Succinic acid, di(4-cyanophenyl) ester	0.01366
Diglycolic acid, di(pentafluorobenzyl) ester	0.01248
Diglycolic acid, di(pentafluorobenzyl) ester	0.01143
Propanoic acid	0.0113
Succinic acid, 3-methylbut-2-en-1-yl diphenylmethyl ester	0.0113
3-Methylbut-2-enoic acid, 4-nitrophenyl ester	0.01114
4-Benzyloxybenzoic acid	0.01063
Diglycolic acid, di(pentafluorobenzyl) ester	0.01046
2-Naphthoic acid, 6-hydroxy-5,7-dimethoxy-, acetate	0.01014
Carbonic acid, allyl pentafluorobenzyl ester	0.00977
Phthalic acid, pentyl tridec-2-yn-1-yl ester	0.0091
Propenoic acid, 2-cyano-3-(1-methyl-5-phenylthio-2-pyrrolyl)-, methyl ester	0.00864
4-(4-Acetoxyphenoxy)benzoic acid	0.00827
4-Chlorobutyric acid, 4-isopropylphenyl ester	0.00815
Acetic acid, diphenyl-, ethyl ester	0.00812
.alpha.-Hydroxyisobutyric acid, acetate	0.00777
Pentandioic acid, (p-t-butylphenyl) ester	0.00743
Succinic acid, 3-chlorophenyl 3-phenylprop-2-en-1-yl ester	0.00713
4-Chlorobutyric acid, 4-isopropylphenyl ester	0.00699
2-Propenoic acid, 3-(4-hydroxyphenyl)-, methyl ester	0.00626
2-Naphthoic acid, 6-hydroxy-5,7-dimethoxy-, acetate	0.00587
Pentanedioic acid, dimethyl ester	0.0055
2,3-Dihydro-1-benzofuran-5-ylacetic acid	0.00537
Pentandioic acid, (p-t-butylphenyl) ester	0.00532
Pentanoic acid	0.00529
3-Bromo-2-furoic acid	0.00527
3,4-Dihydroxymandelic acid, 4TMS derivative	0.00523
Pentanoic acid	0.00463
Butanoic acid	0.00409
Acetic acid, (acetyloxy)-	0.00401
Carbonic acid, monoamide, N-(2-butyl)-N-(2-ethylhexyl)-, octyl ester	0.00321
Ethylphosphonic acid	0.00308
2-Naphthalenecarboxylic acid, 3-hydroxy-, hydrazide	0.00302
Succinic acid, 2,4,6-trichlorophenyl 2-naphthylmethyl ester	0.00254
Carbonic acid, monoamide, N-(2-pentyl)-N-hexadecyl-, methyl ester	0.00098
Acetic acid, 7,7,10a,12a-tetramethyl-2,5-dioxo-1,2,3,4,4a,4b,5,7,8,9,10,10a,10b,11,12,12a-hexadecahydro-1-azachrysen-8-yl ester	0.00072

Total Area (%)	7.87768
Sample-PNS+PS (30 wt.%)	
Pimelic acid, di(phenethyl) ester	10.0847
n-Hexadecanoic acid	0.913
Octadecanoic acid	0.404
Succinic acid, 3-methylbut-2-en-1-yl diphenylmethyl ester	0.17602
Oxalic acid bis-(4-methyl-benzyl) ester	0.16161
trans-13-Octadecenoic acid	0.15165
Phenylacetic acid, 4-cyanophenyl ester	0.14208
Hexadecanoic acid, 2-hydroxy-1-(hydroxymethyl)ethyl ester	0.1212
Tetradecanoic acid	0.11883
Pentanoic acid, 5-hydroxy-, 2,4-di-t-butylphenyl esters	0.10337
Benzoic acid, methyl ester	0.09543
Succinic acid, 3-methylbut-2-en-1-yl diphenylmethyl ester	0.09439
Succinic acid, 3-methylbut-2-en-1-yl diphenylmethyl ester	0.09149
Phenylacetic acid, 4-cyanophenyl ester	0.09145
Octadecanoic acid, 2,3-dihydroxypropyl ester	0.08155
Glutaric acid, 2,3-dichlorophenyl diphenylmethyl ester	0.07477
Succinic acid, 3-methylbut-2-en-1-yl diphenylmethyl ester	0.07041
3-Furancarboxylic acid, methyl ester	0.06327
Hexadecanoic acid, methyl ester	0.04967
3-(Benzoylthio)-2-methylpropanoic acid	0.04929
Oxalic acid, 2-isopropylphenyl pentadecyl ester	0.04921
Glutaric acid, 2-fluorophenyl diphenylmethyl ester	0.04738
Phenylglyoxylic Acid, 3-methylbutyl ester	0.03101
Propanedioic acid, [methyl(phenylmethyl)amino]-, diethyl ester	0.03084
Benzoic acid, 4-hydroxy-, hydrazide	0.0303
(Z)-15-Octadecenoic acid methyl ester	0.02847
Sulfurous acid, 2-ethylhexyl hexyl ester	0.02785
Nitrous acid, ethyl ester	0.02246
Succinic acid, 3-methylbut-2-yl phenethyl ester	0.01931
5-Chlorovaleric acid, 4-isopropylphenyl ester	0.01671
Butanoic acid, methyl ester	0.01439
4-Chlorobutyric acid, 3,4-dimethylphenyl ester	0.01428
Acetic acid, methyl ester	0.01394
4-Ethylbenzoic acid, cyclobutyl ester	0.01343
Propanoic acid, 2-methyl-, anhydride	0.01339
Glyoxylic acid, phenyl-, (2'-acetylphenyl) ester	0.01321
Benzoic acid, 2-methyl-, anhydride	0.01268
Acetic acid ethenyl ester	0.01217
Homovanillic acid	0.01204
Succinic acid, 3-methylbut-2-en-1-yl diphenylmethyl ester	0.01189

Butanedioic acid, methyl-, dimethyl ester	0.00935
Phosphinic acid, diethyl-, methyl ester	0.00873
Z-2-Propenoic acid, 3-iodo-, methyl ester	0.00805
Phosphoric acid, dimethyl 1-propenyl ester	0.00785
2-Propynoic acid, methyl ester	0.00754
Succinic acid, 2-fluorophenyl diphenylmethyl ester	0.00754
Fumaric acid, monoamide, N,N-dimethyl-, 2-fluorophenyl ester	0.00724
Ethaneperoxoic acid, 1-cyano-1-phenylbutyl ester	0.00665
Acetic acid, diphenyl-, ethyl ester	0.00641
m-Toluic acid, cyclobutyl ester	0.006
Succinic acid, phenethyl pentafluorobenzyl ester	0.00516
9,10-Dihydro-9,10-dimethyl-9,10-ethanoanthracene-11,12-dicarboxylic acid, dimethyl ester	0.00447
Succinic acid, 3-chlorophenyl 4-methoxybenzyl ester	0.00442
Isophthalic acid, 2-bromo-4-fluorophenyl hexyl ester	0.00362
Propanoic acid, 2-methyl-, 3-phenylpropyl ester	0.00332
2-Furancarboxylic acid, 3-methyl-, methyl ester	0.00276
Nitrous acid, ethyl ester	0.0021
3-Furancarboxylic acid, methyl ester	0.00182
Isophthalic acid, isohexyl 1-isopropyl-2-methylpropyl ester	0.00016
Total Area (%)	13.6763
Sample-PNS+PS (30 wt.%)+CuO (5 wt.%)	
Formic acid, undecyl ester	1.08999
Octadecanoic acid	0.71812
Acetic acid	0.23053
Succinic acid, 3-methylbut-2-en-1-yl diphenylmethyl ester	0.21637
Hexadecanoic acid, 2-hydroxy-1-(hydroxymethyl)ethyl ester	0.19793
1,3-Oxazolidine-4-carboxylic acid, 3-benzoyl-2-(1,1-dimethylethyl)-5-methyl	0.19782
Tetradecanoic acid	0.19284
Phenylacetic acid, 4-cyanophenyl ester	0.19036
Pentanedioic acid, (2,4-di-t-butylphenyl) mono-ester	0.16167
Oxalic acid bis-(4-methyl-benzyl) ester	0.15825
n-Hexadecanoic acid	0.14049
11-Octadecenoic acid, methyl ester	0.13938
trans-9-Octadecenoic acid, pentyl ester	0.13618
Succinic acid, 3-methylbut-2-en-1-yl diphenylmethyl ester	0.12106
3-Benzoylamino-2-benzyl-butyric acid, methyl ester	0.11791
Succinic acid, 3-methylbut-2-en-1-yl diphenylmethyl ester	0.11132
Benzoic acid, methyl ester	0.10747
Octadecanoic acid, 2,3-dihydroxypropyl ester	0.09163
Hexadecanoic acid, methyl ester	0.06946
9-Octadecenoic acid (Z)-, methyl ester	0.06361

Butanoic acid	0.0542
3-Furancarboxylic acid, methyl ester	0.0509
Phthalic acid, cyclobutyl isobutyl ester	0.04676
Sulfurous acid, 2-ethylhexyl undecyl ester	0.04514
Carbonic acid, butyl 3-methylphenyl ester	0.04465
Phenylacetic acid, 2,3-dichlorophenyl ester	0.04113
Benzoic acid, 2-methyl-, anhydride	0.03857
Succinic acid, 3-chlorophenyl 4-methoxybenzyl ester	0.03611
3-Furancarboxylic acid	0.03408
4-Chlorobutyric acid, 4-isopropylphenyl ester	0.0314
Succinic acid, 3-methylbut-2-en-1-yl diphenylmethyl ester	0.02882
Sulfurous acid, 2-pentyl undecyl ester	0.02364
Butanoic acid, methyl ester	0.02218
6-Fluoro-2-trifluoromethylbenzoic acid, 2-formyl-4,6-dichlorophenyl ester	0.02043
1,3-Oxazolidine-4-carboxylic acid, 3-benzoyl-2-(1,1-dimethylethyl)-5-methyl	0.01901
Succinic acid, di(3-phenylpropyl) ester	0.01789
Pentandioic acid, (p-t-butylphenyl) ester	0.01758
Pentanedioic acid, dimethyl ester	0.0173
Propanoic acid, 2-methyl-, anhydride	0.01566
Phthalic acid, bis(2-pentyl) ester	0.01241
Propanoic acid, 2-methyl-, anhydride	0.01208
Pentanedioic acid, (2,4-di-t-butylphenyl) mono-ester	0.01158
2-Azetidinecarbothioic acid, 1-(phenylmethyl)-, S-phenyl ester, (S)-	0.01109
2-Thiophenecarboxylic acid, 4-nitrophenyl ester	0.00998
Sulfurous acid, 2-ethylhexyl hexyl ester	0.00977
Phthalic acid, 4-bromophenyl octyl ester	0.00927
Phenylacetic acid, 2,3-dichlorophenyl ester	0.00902
Glutaric acid, 2-fluorophenyl diphenylmethyl ester	0.00781
Sulfurous acid, 2-ethylhexyl hexyl ester	0.00779
Succinic acid, 2,4,6-trichlorophenyl 2-naphthylmethyl ester	0.00664
5-(Difluoromethyl)-2-methylpyrazole-3-carboxylic acid	0.00641
Pentanedioic acid, 2-oxo-, dimethyl ester	0.00564
Pipecolic acid, N-octyloxycarbonyl-, undecyl ester	0.00407
5-Ethoxy-3,4-dihydro-2H-pyrrole-2-carboxylic acid, ethyl ester	0.00407
Propanoic acid, 2-oxo-	0.00405
Barbituric acid, 5,5-dipropyl-	0.00385
2-Pyrrolidinecarboxylic acid, 1,2-dimethyl-5-oxo-, methyl ester	0.00369
4-Chlorobutyric acid, 3,4-dimethylphenyl ester	0.00348
2-Propenoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-	0.00322

pentadecafluorooctyl ester	
1-Adamantanecarboxylic acid, nonyl ester	0.00214
2,3,4-Trifluorobenzoic acid, 2-chloroethyl ester	0.00198
Carbonic acid, monoamide, N-(2-pentyl)-N-hexadecyl-, methyl ester	0.00147
Phthalic acid, di(3-methylphenyl) ester	0.00137
3-Furancarboxylic acid, methyl ester	0.00134
Propenoic acid, 2-cyano-3-(1-methyl-5-phenylthio-2-pyrrolyl)-, methyl ester	0.00132
Carbonic acid, monoamide, N-(2-pentyl)-N-dodecyl-, propargyl ester	0.00124
Benzoic acid, 4-[(2,4-dimethoxy-6-pentylbenzoyl)oxy]-2-methoxy-6-pentyl-, methyl ester	0.00077
Carbonic acid, monoamide, N-(2-pentyl)-N-nonyl-, propargyl ester	0.00069
Acetic acid, dimethoxy-, methyl ester	0.00062
Carbonic acid, monoamide, N-(2-pentyl)-N-dodecyl-, propargyl ester	0.00056
2-Furoic acid, 4-methoxyphenyl ester	0.00037
2-Furoic acid, 4-chlorophenyl ester	0.00028
Total Area (%)	5.21794
Compounds- Alcohols	
Sample-PNS	
Compounds Name	Area (%)
2-Acetyl-4-(1,2-dihydroxypropyl)phenyl 1,3-benzodioxole-5-carboxylate, 2TFA	4.2983
Catechol	0.83838
4-Ethylcatechol	0.65335
p-Cresol	0.49057
n-Pentadecanol	0.37911
2-Cyclohexen-3-ol-1-one, 2-[1-iminoethyl]-	0.3615
n-Pentadecanol	0.30648
Creosol	0.28437
1-Hexadecanol	0.28353
n-Pentadecanol	0.27864
1-Undecanol	0.21409
1,3-Benzodithiolane, 4-methyl-2-(3-methylbutyl)oxy-	0.20388
4-Amino-6-methyl-2-methylthiopyrrolo[2,3-d]pyrimidin	0.19865
Acetyl eugenol	0.19397
1-(1,3-Dimethyl-1H-pyrazol-4-yl)ethanone	0.17439
1-Decanol, 2-hexyl-	0.15283
Pyrolo[3,2-d]pyrimidin-2,4(1H,3H)-dione	0.13907
Pyrolo[3,2-d]pyrimidin-2,4(1H,3H)-dione	0.13708
1-Decanol	0.12651
1-Nonanol	0.12474

3-Isoxazolamine, 5-methyl-	0.1226
p-Cresol	0.11455
1-Methyl-2,5-dipropyldecahydroquinoline	0.10796
Pyrolo[3,2-d]pyrimidin-2,4(1H,3H)-dione	0.10339
Resorcinol, 2TMS derivative	0.10095
3,5-Dimethyl-1H-pyrazole-4-carbaldehyde	0.09862
1,3,5-Trimethyl-1,3-dihydro-benzoimidazol-2-one	0.09599
5H-Tetrazol-5-amine	0.08803
s-Triazolo[4,3-c]pyrimidin-5(1H)-one	0.08138
1-Tetradecanol	0.06937
Pyrazolo[5,1-c][1,2,4]benzotriazin-8-ol	0.06159
1,3-Dioxolan-2-one, 4,5-bis(methylene)-	0.05726
1,2-Propanediol, 3-benzyloxy-1,2-diacetyl-	0.05584
1H-Pyrazole, 4,5-dihydro-3-methyl-1-propyl-	0.05441
1,3-Benzodioxole	0.05374
4-Methoxycarbonyl-4-butanolide	0.04748
1H-Pyrazole, 5-methoxy-1,3-dimethyl-	0.0441
7-Isoquinolinol, 1,2,3,4-tetrahydro-6-methoxy-1-salicyl-	0.04329
Orcinol, 2TMS	0.04124
3,3',5,5'-Tetra-tert-butylbiphenyl-2,2'-diol	0.04071
Ethanol, 2-phenoxy-	0.0378
1,3-Benzodioxole	0.03694
5H-Oxazolo[3,2-a]pyridine-8-carbonitrile, 6-ethyl-2,3-dihydro-2,7-dimethyl-5-oxo-	0.03683
2-Cyclohexen-3-ol-1-one, 2-[1-iminoethyl]-	0.03664
1H-pyrazol-4-ol	0.03496
Pyrolo[3,2-d]pyrimidin-2,4(1H,3H)-dione	0.03399
Orcinol, 2TMS	0.03271
1H-Pyrazole, 4,5-dihydro-3-methyl-1-propyl-	0.02848
Benzo[g][1]benzothiopyrano[4,3-b]indole	0.02824
1,2-Propanediol, 3-benzyloxy-1,2-diacetyl-	0.02527
Orcinol, 2TMS	0.02474
1H-Benzotriazole, 7-amino-1-methyl-	0.02427
2-Methoxyresorcinol	0.02172
L-Proline, N-butyl-, butyl ester	0.02138
1H-Imidazole, 4,5-dihydro-2-phenyl-	0.02101
3-Methyl-4-nitropyrazole	0.02089
2-[(2-Fluorobenzyl)amino]-2-methyl-1-propanol	0.02026
Resorcinol, 2-acetyl-	0.02009
1-Methyl-2,5-dipropyldecahydroquinoline	0.01994
1,1-Diphenyl-2-propanol	0.01929
Isoquinolin-6-ol, 1-[4-hydroxybenzyl]-1,2,3,4-tetrahydro-7-methoxy-	0.01921

Orcinol, 2TMS	0.01891
8-Methoxy-11-methyl-11H-indolo[3,2-c]quinoline	0.01845
Oxypurinol	0.01841
1H-Pyrrolo[2,3-b]pyridine, 2-methyl-	0.01776
Pyrolo[3,2-d]pyrimidin-2,4(1H,3H)-dione	0.01715
1H-Indole, 2,3-dihydro-4-methyl-	0.01654
1,2-Propanediol, 3-benzyloxy-1,2-diacetyl-	0.01589
1,3-Dioxolan-2-one, 4,5-bis(methylene)-	0.01453
2-Cyclohexen-3-ol-1-one, 2-[1-iminoethyl]-	0.01452
1H-Benzimidazole, 1-(2-phenylethenyl)-, (E)-	0.01378
(S)-4-Ethyl-2-oxazolidone	0.01245
Diethylene glycol dibenzoate	0.01238
Benzonitrile, 4-(6-methoxy-2-quinolyl)	0.01198
5-[1,2,4]Triazol-1-yl-pyrrolidin-2-one	0.0115
Orcinol, 2TMS	0.011
3-n-Propyl-2-pyrazolin-5-one	0.0106
8-Methyl-5H-pyrido[4,3-b]indole	0.0094
Aspidinol	0.00911
1H-Benzimidazole, 2-(5-ethyl-2-pyridinyl)-	0.00896
3-(Hydroxyimino)-6-methylindolin-2-one	0.00889
1,2,3,4-Tetrahydro-3-(phenylacetamido)quinoline	0.00866
Indole-2-carboxaldehyde	0.00792
1,3-Dioxolan-2-one, 4,5-bis(methylene)-	0.00751
1H-Imidazole-4-methanol	0.00737
1H-Imidazole	0.00731
Pyrolo[3,2-d]pyrimidin-2,4(1H,3H)-dione	0.00588
1H-1,2,4-Triazol-5-amine, 1-methyl-	0.00578
1H-1,3-Benzimidazole, 5-methoxy-1-methyl-2-(4-morpholinylmethyl)-	0.00557
1-Methyl-2,5-dipropyldecahydroquinoline	0.00549
Orcinol, 2TMS	0.00544
Pyrimido[1,6-a]indole, 1,2,3,4-tetrahydro-2,5-dimethyl-	0.0054
1H-Pyrazole, 4,5-dihydro-3-methyl-1-propyl-	0.00489
N'-Quinazolin-4-ylacetohydrazide, N,N'-dimethyl-	0.00471
4-Amidino-2-phenylquinazoline	0.00459
2-Propanol, 1-methoxy-	0.00312
3,4,5-Trifluorobenzyl alcohol, 2-methylpropyl ether	0.00291
3,4-Dihydroxyphenylglycol, 4TMS derivative	0.00267
Ethanol, 2-ethoxy-	0.00258
1H-1,3-Benzodiazole-5-carbaldehyde	0.00249
4-Amidino-2-phenylquinazoline	0.00209
Pyridine-3-carbonitrile, 1,2-dihydro-6-(1,3-benzodioxol-5-yl)-2-oxo-4-phenyl-	0.00194

Pyridine-3-carbonitrile, 1,2-dihydro-6-(1,3-benzodioxol-5-yl)-2-oxo-4-phenyl-	0.00188
2-Benzylquinoline	0.00185
3,3',5,5'-Tetra-tert-butylbiphenyl-2,2'-diol	0.00178
1H-Imidazole, 4-bromo-	0.00148
Total Area (%)	12.2702
Sample-PNS+PS (30 wt.%)	
Creosol	0.414
p-Cresol	0.37908
.alpha.-Pyrrolidinononaphenone	0.36465
2-Phenyl-3-methyl-pyrrolo(2,3-b)pyrazine	0.19606
Maltol	0.11445
Ethanone, 1-(2,4-dimethyl-1H-pyrrol-3-yl)-	0.11374
1H-Pyrazole, 1-methyl-	0.08083
n-Tridecan-1-ol	0.06846
2-Furanmethanol, acetate	0.06305
n-Pentadecanol	0.06164
1-Undecanol	0.05967
.beta.-Sitosterol acetate	0.05867
1-Undecanol	0.05114
Acetyl eugenol	0.04637
1H-Imidazole-4-methanol	0.04527
1,2-Propanediol, 3-benzyloxy-1,2-diacetyl-	0.04398
1,2-Dimethylbenzimidazole	0.042
1-Decanol, 2-hexyl-	0.04119
Acetyl eugenol	0.0386
1H-Pyrazole, 4,5-dihydro-3-methyl-	0.0385
n-Pentadecanol	0.03729
Pyrolo[3,2-d]pyrimidin-2,4(1H,3H)-dione	0.03567
4-Formyl-3,5-dimethyl-1H-pyrrole-2-carbonitrile	0.03438
1-Phenyl-1-decanol	0.03333
3,5-Dimethyl-1H-pyrazole-4-carbaldehyde	0.03307
1,2-Propanediol, 3-benzyloxy-1,2-diacetyl-	0.03305
di-p-Tolylacetylene	0.0328
5-Methylbenzimidazole	0.03045
1H-1,3-Benzodiazole-5-carbaldehyde	0.02921
1-(1,3-Dimethyl-1H-pyrazol-4-yl)ethanone	0.02904
Resorcinol, 2-acetyl-	0.02726
1H-Pyrazole, 5-methoxy-1,3-dimethyl-	0.02618
Resorcinol, 2-acetyl-	0.02368
Butyrolactone	0.02273
1-Methyl-2,5-dipropyldecahydroquinoline	0.02223
1,2-Propanediol, 3-benzyloxy-1,2-diacetyl-	0.02209

Resorcinol, 2-acetyl-	0.02049
Proline, 2-methyl-5-oxo-, methyl ester	0.0197
Resorcinol, 2TMS derivative	0.01864
1,2-Dimethylbenzimidazole	0.01847
1-(2-Hydroxyethyl)-1,2,4-triazole	0.01672
Oxypurinol	0.0163
di-p-Tolylacetylene	0.01495
Tridecanol, 2-ethyl-2-methyl-	0.01484
1H-Benzimidazole, 1-(2-phenylethenyl)-, (E)-	0.0145
8-Phenylisoquinoline	0.01385
5-(Chloromethyl)oxazole	0.01309
1H-Benzimidazole, 5,6-dimethyl-	0.013
Isoquinoline, 1-butyl-3,4-dihydro-	0.01219
4-((1H-Benzo[d]imidazol-2-yl)methyl)morpholine	0.01148
1H-Isoindole, 2,3-dihydro-	0.01102
1,5,6,7-Tetrahydro-[1,2,4]triazolo[1,5-a]pyrimidine	0.01071
3-Butene-1,2-diol, 1-(2-furanyl)-	0.01039
Mequinol	0.01017
1H-Imidazole, 4,5-dihydro-2-phenyl-	0.00886
1-(1,3-Dimethyl-1H-pyrazol-4-yl)ethanone	0.00867
Benzimidazole, 4,5,6,7-tetramethyl-	0.00847
Aspidinol	0.00837
6H-Dibenzo[a,g]quinolizine, 5,8,13,13a-tetrahydro-2,3-dimethoxy-, (.+/-.)-	0.00817
1H-Isoindole, 2,3-dihydro-	0.00808
1,3-Benzodioxole	0.00787
1-Methyl-2,5-dipropyldecahydroquinoline	0.00773
(5R,8R,8aS)-5-Heptyl-8-methyloctahydroindolizine	0.00772
Isoquinoline, 1-[(3,5-dibenzyloxy)benzyl]-1,2,3,4-tetrahydro-6-methoxy-	0.00745
Methanone, (2,3-dihydro-5-benzofuryl)(4-morpholyl)-	0.00738
Desaspidinol	0.00734
(2-Methyloxan-2-yl)methanol	0.0073
Pyrolo[3,2-d]pyrimidin-2,4(1H,3H)-dione	0.0069
di-p-Tolylacetylene	0.00682
1-Methyl-2,5-dipropyldecahydroquinoline	0.00677
1H,5H,7H,11H-Dipyrazolo[1,2-a:1',2'-d][1,2,4,5]tetrazine, tetrahydro-	0.00671
4-Phenoxy-2-phenyl-1-naphthalenol	0.00624
(1H)Pyrrole-3-carbonitrile, 2-methyl-	0.00615
2,5,6-Trimethylbenzimidazole	0.00612
Orcinol, 2TMS	0.0056
2-Formyl-4,5-dimethyl-pyrrole	0.00541
3-Methyl-1H-pyrazole-4-carbaldehyde	0.00526

1H-Benzimidazole, 5,6-dimethyl-	0.00521
11H-Benzo[a]carbazole	0.00509
1-Phenyl-1-decanol	0.00508
Anisole	0.00501
Desaspidinol	0.00492
1,3-Dioxolan-2-one, 4,5-bis(methylene)-	0.00455
2-(Diethylaminophenylmethyl)cyclohexanol	0.00452
Furo(3,4-e)-1,3-benzodioxol-8(6H)-one, 6-(1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-isoquinolinyl)-, (R-(R*,S*))-	0.00398
(5R,8aR)-5-Propyloctahydroindolizine	0.00389
8-Methyl-5H-pyrido[4,3-b]indole	0.00382
1H-Benzimidazole, 5,6-dimethyl-	0.00377
1H-Benzimidazole, 1-(2-phenylethenyl)-, (E)-	0.00311
3,3',5,5'-Tetra-tert-butylbiphenyl-2,2'-diol	0.00295
Orcinol, 2TMS	0.00275
3-Methyl-1H-pyrazole-4-carbaldehyde	0.00259
Methyl 1-methyl-1H-pyrazole-3-carboxylate	0.00254
1H-Benzimidazole, 1-(2-phenylethenyl)-, (E)-	0.00206
8-Methyl-5H-pyrido[4,3-b]indole	0.00201
1-[3-(methylthio)propyl]-2-formylpyrrole	0.00185
Isoquinolinium, 2-methyl-1-phenyl-, iodide	0.00184
2-[(4-Fluorobenzyl)amino]ethanol	0.00177
9H-Carbazole, 9-phenyl-	0.00175
2-Benzylquinoline	0.0017
1H-Benzimidazole, 2-(1,1-dimethylethyl)-	0.00133
1-Methyl-2,5-dipropyldecahydroquinoline	0.00119
1H-Benzimidazole, 1-(2-phenylethenyl)-, (E)-	0.00114
6-Bromo-2-methylindole	0.00089
Silanol, trimethyl-	0.00075
1,1-Ethanediol, diacetate	0.00071
4-Anilinoquinazoline	0.00061
1H-1,2,4-Triazole	0.0006
Total Area (%)	3.30369
Sample-PNS+PS (30 wt.%)+CuO (5 wt.%)	
p-Cresol	0.7918
Creosol	0.55684
p-Cresol	0.43429
.beta.-Methoxy-.alpha.-phenylphenethyl alcohol	0.25181
Cyclododecanemethanol	0.18057
1-Phenyl-1-decanol	0.09123
Eugenol	0.06568
Acetyl eugenol	0.06256

n-Pentadecanol	0.05959
1-Undecanol	0.04288
3,4,5-Trifluorobenzyl alcohol, 2-methylpropyl ether	0.033
1-Decanol	0.03052
1-Tetradecanol	0.02797
Oxypurinol	0.02732
1H-Imidazole-4-methanol	0.02117
2-[(2-Fluorobenzyl)amino]-2-methyl-1-propanol	0.0115
3,3',5,5'-Tetra-tert-butylbiphenyl-2,2'-diol	0.00265
Total Area (%)	2.69138
Compounds- Hydrocarbons	
Sample-PNS	
Compounds Name	Area (%)
Benzene, 1,1'-(1-butene-1,4-diyl)bis-, (Z)-	6.75633
Styrene	4.50387
3,5-Dimethoxy-4-hydroxytoluene	2.6083
4-Methoxy-1,3-benzenediol	1.22875
1,2-Benzenediol, 3-methyl-	0.76074
Benzene, 1,1'-(1,3-propanediyl)bis-	0.73467
Ethylbenzene	0.73256
Benzene, 1-methoxy-4-(methylthio)-	0.70497
.alpha.-Methylstyrene	0.6526
1,2-Benzenediol, 3-methyl-	0.49607
4-Methoxy-2-methyl-1-(methylthio)benzene	0.43808
Benzeneacetic acid, 3,4-dihydroxy-	0.35728
Benzene, 1,1'-(3-methyl-1-propene-1,3-diyl)bis-	0.31464
Benzene, 1,1'-(1,3-propanediyl)bis-	0.3056
Benzene, 1,1'-(1,3-propanediyl)bis-	0.21227
benzene, 1,1',1''-[5-methyl-1-pentene-1,3,5-triyl]tris-	0.1967
benzene, 1,1',1''-[5-methyl-1-pentene-1,3,5-triyl]tris-	0.19067
Benzeneethanol, 4-hydroxy-	0.1586
Benzene, 1,1'-(3-methyl-1-propene-1,3-diyl)bis-	0.15557
1,2-Benzenediol, mono(methylcarbamate)	0.14332
Toluene	0.12106
Benzene, 1-methoxy-4-methyl-	0.11982
1,3-Benzenediol, 4,5-dimethyl-	0.11945
Benzene, 1,1'-(1-methyl-1,3-propanediyl)bis-	0.11638
Benzene, 1,1'-(1,5-hexadiene-1,6-diyl)bis-	0.09789
Benzene, 1,1'-(3-methyl-1-propene-1,3-diyl)bis-	0.09675
Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, methyl ester	0.09499
1-Cyclohexyldimethylsilyloxy-3,5-dimethylbenzene	0.09065
Benzene, 1,1'-(1-butene-1,4-diyl)bis-, (Z)-	0.08347

Benzene, 1,1',1'',1'''-(1,2,3,4-cyclobutanetetrayl)tetrakis-	0.08004
p-Aminotoluene	0.07639
Benzene, [3-(diphenylmethylene)cyclopentyl]-	0.07639
1,4-Benzenedicarboxaldehyde, 2-methyl-	0.07462
1,3-Benzenediol, O-(4-nitrobenzoyl)-O'-(2-thiophenecarbonyl)-	0.06387
Benzene, 1,1'-(1-butene-1,4-diyl)bis-, (Z)-	0.0622
Indane	0.06214
Benzene, (isothiocyanatomethyl)-	0.05939
Benzene, 1,4-dimethoxy-	0.05429
Benzene, 1,1',1'',1'''-(1,2,3,4-butanetetrayl)tetrakis-	0.04477
Benzene, 1,2,3-trimethoxy-5-methyl-	0.04216
Benzene, 4-ethenyl-1,2-dimethyl-	0.03779
Benzene, 1,1'-(2-pentene-1,5-diyl)bis-	0.0368
1-Dimethylisopropylsilyloxy-4-methoxybenzene	0.03566
Benzene, (1-methylethyl)-	0.03465
1,2-Benzenediol, O-(4-ethylbenzoyl)-O'-propargyloxycarbonyl-	0.03073
Benzene, 1,1'-(1-butene-1,4-diyl)bis-, (Z)-	0.02915
1,2-Benzenediol, 3-methoxy-	0.02683
1,4-Cyclohexanedione	0.02519
1,2-Benzenediol, O-(4-ethylbenzoyl)-O'-propargyloxycarbonyl-	0.02388
1-Hexyl-2-nitrocyclohexane	0.02337
1,4-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	0.02332
Benzenemethanol, .alpha.-[1-(ethylmethylamino)ethyl]-, [R-(R*,S*)]-	0.01867
1,3-Benzenediol, o-(4-butylbenzoyl)-o'-propargyloxycarbonyl-	0.01749
Benzene, 1-methoxy-4-(methylthio)-	0.01711
5-Ethyl-1,3-benzenediol, 2TMS	0.01377
3,4-(Methylenedioxy)toluene	0.0128
Butylated Hydroxytoluene	0.01119
1-Dimethylisopropylsilyloxy-4-methoxybenzene	0.01069
Indane	0.01054
Benzene, 1-ethynyl-4-methyl-	0.01051
1-Cyano-4-diphenyl(tert-butyl)silyloxybenzene	0.01039
Benzene, 1-methoxy-4-propyl-	0.00957
1,4-Diethynylbenzene	0.00767
4-(2-Ethylhexoxy)ethylbenzene	0.00344
Benzene, 1,3,5-trichloro-	0.00304
Benzene, 1,2,3-trimethyl-	0.00221
1-Cyano-4-diphenyl(tert-butyl)silyloxybenzene	0.00125
Benzeneacetic acid, 2-hydroxy-5-(3-methoxy-3-oxo-1-	0.0004

propenyl)-.alpha.-[(4-methoxyphenyl)methylene]-, methyl ester	
Total Area (%)	23.7764
Sample-PNS+PS (30 wt.%)	
Ethylbenzene	7.65983
.alpha.-Methylstyrene	3.82729
Benzene, 1,1'-(1,3-propanediyl)bis-	3.80261
Benzene, 1,1'-(3-methyl-1-propene-1,3-diyl)bis-	2.1666
Toluene	2.13778
3,5-Dimethoxy-4-hydroxytoluene	0.97912
benzene, 1,1',1''-[5-methyl-1-pentene-1,3,5-triyl]tris-	0.96251
Benzene, 1,1'-(1-methyl-1,3-propanediyl)bis-	0.93253
Benzene, 1,1'-(1-butene-1,4-diyl)bis-, (Z)-	0.81411
Benzene, 1,1'-(1-butene-1,4-diyl)bis-, (Z)-	0.80223
Benzene, 1,1'-(3-methyl-1-propene-1,3-diyl)bis-	0.77071
Benzene, 1,1'-(3-methyl-1-propene-1,3-diyl)bis-	0.75275
Benzene, (1-methylethyl)-	0.72643
benzene, 1,1',1''-[5-methyl-1-pentene-1,3,5-triyl]tris-	0.68403
Benzene, [3-(diphenylmethylene)cyclopentyl]-	0.64112
Benzene, 1,1'-(1,3-propanediyl)bis-	0.59544
Benzene, [3-(diphenylmethylene)cyclopentyl]-	0.54474
Benzene, cyclopropyl-	0.49071
Benzene, 1,1',1'',1'''-(1,2,3,4-butanetetrayl)tetrakis-	0.39082
Benzene, 1,1'-(1-methyl-1,2-ethanediyl)bis-	0.31067
Benzene, (1-methylenepropyl)-	0.29491
Benzene, 1,1'-(2-pentene-1,5-diyl)bis-	0.26396
Benzene, 1,1'-(1,4-butanediyl)bis-	0.25743
Benzene, propyl-	0.22455
1,4-Dibutyl benzene-1,4-dicarboxylate	0.22122
benzene, 1,1'-(1,2-cyclopentanediyl)bis-	0.18524
Benzene, cyclopropyl-	0.18033
Benzenemethanamine, N-(phenylmethylene)-	0.17858
Benzene, 1,1'-(1,2-ethanediyl)bis[4-methyl-	0.17006
Benzene, 1,1'-(1-butene-1,4-diyl)bis-, (Z)-	0.15482
Benzene, 1,1'-(1-butene-1,4-diyl)bis-, (Z)-	0.15204
Benzene, 1,1'-(1,3-propanediyl)bis-	0.14248
Benzene, 1,1'-(1-butene-1,4-diyl)bis-, (Z)-	0.13636
benzene, 1,1'-(1-methylene-1,2-ethanediyl)bis-	0.1084
Benzene, 1,1'-[1-(2-propenyl)-1,2-ethanediyl]bis-	0.10218
1-(2-Chloroethyl)-2,6-difluorobenzene	0.09963
1,2-Benzenediol, 3-methoxy-	0.087
Indane	0.08015
Benzene, 3-butenyl-	0.07812

benzene, 1,1',1''-[5-methyl-1-pentene-1,3,5-triyl]tris-	0.0705
4-Methoxy-2-methyl-1-(methylthio)benzene	0.05579
Benzene, 1-methyl-3-(1-methylethenyl)-	0.05482
Benzene, 1-ethynyl-4-methyl-	0.05157
4-(2-Ethylhexoxy)ethylbenzene	0.0467
1,3-Benzenediol, 4,5-dimethyl-	0.04666
Benzene, 1,1'-(1-butene-1,4-diyl)bis-, (Z)-	0.04445
Benzene, 1,2,3-trimethoxy-5-methyl-	0.02833
1,4-Benzenediamine, N,N-dimethyl-	0.02803
Indane	0.02772
Benzene, 4-ethenyl-1,2-dimethyl-	0.02656
Benzene, 1,2,4-trimethyl-	0.02407
1,2,3-Trimethoxybenzene	0.02343
Cyclohexane, 1,1,3-trimethyl-	0.02284
Benzene	0.02104
Benzene, 1-hexynyl-	0.02077
Benzene, 3-butenyl-	0.01982
Benzene, 1-propynyl-	0.01929
Benzene-1,2-dicarbonitrile, 3,6-bis(3-phenylpropoxy)-	0.01897
Benzene, 1,2,3-trimethyl-	0.01883
Benzene, 1,1'-(1,2-dimethyl-1,2-ethanediyl)bis-, (R*,S*)-	0.01824
Benzene, 1-methyl-4-propyl-	0.01793
3,5-Dimethoxytoluene	0.015
1,2-Benzenediol, O-(4-butylbenzoyl)-O'-(isobutoxycarbonyl)-	0.0147
1,4-Benzenediol, 2-methoxy-	0.01373
Benzene, 1,1',1'',1'''-(1,5-hexadiene-1,3,4,6-tetrayl)tetrakis-	0.01318
1,3-Benzenediol, monobenzoate	0.01108
Benzene, ethylpentamethyl-	0.01024
Benzene, 4-ethenyl-1,2-dimethyl-	0.01012
Benzene, 1,3,5-trimethyl-2-(1,2-propadienyl)-	0.0083
1,4-Benzenediamine, N,N-dimethyl-	0.00818
1,2-Benzenediol, O-(4-ethylbenzoyl)-O'-propargyloxycarbonyl-	0.00768
Benzene, 1,2,3-trimethyl-	0.00641
Benzene, [1-[[1-(1-methylethyl)-3-butenyl]oxy]ethyl]-, [S-(R*,R*)]-	0.00534
3,4-(Methylenedioxy)toluene	0.00476
1,2-Benzenediol, O-(4-ethylbenzoyl)-O'-propargyloxycarbonyl-	0.00462
Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, methyl ester	0.00434
1,2-Benzenediol, O-(4-butylbenzoyl)-O'-(isobutoxycarbonyl)-	0.0042
4-Methoxy-1,3-benzenediol	0.00401
Benzene, 1,1',1'',1'''-(1,2-ethanediylidene)tetrakis-	0.00355

4-Acetoxy-3-methoxystyrene	0.00265
3,4-(Methylenedioxy)toluene	0.00233
3,4-(Methylenedioxy)toluene	0.00203
1,3-Benzenediol, 4,5-dimethyl-	0.00201
Benzenemethanol, .alpha.-[1-(ethylmethylamino)ethyl]-, [R-(R*,S*)]-	0.002
Benzeneethanamine, .alpha.-methyl-N-[(pentafluorophenyl)methyl]-	0.00185
1-Dimethylisopropylsilyloxy-4-methoxybenzene	0.00129
(2,2-Difluoroethyl)benzene	0.00078
Benzene, 1-(4-phenyl-1,3-butadiynyl)-3-[2-(trimethylsilyl)ethynyl]-	0.00078
Total Area (%)	33.981
Sample-PNS+PS (30 wt.%)+CuO (5 wt.%)	
Benzene, 1,1'-(1,2-cyclobutanediyl)bis-, cis-	11.0898
Ethylbenzene	5.6446
Benzene, 1,1'-(1,3-propanediyl)bis-	4.47756
.alpha.-Methylstyrene	4.00826
Toluene	1.34075
Benzene, 1,1'-(3-methyl-1-propene-1,3-diyl)bis-	1.15951
benzene, 1,1',1''-[5-methyl-1-pentene-1,3,5-triyl]tris-	1.1174
Benzene, 1,1'-(1-methyl-1,2-ethanediyl)bis-	0.99082
Benzene, 1,1'-(3-methyl-1-propene-1,3-diyl)bis-	0.83071
Benzene, 1,1'-(1-butene-1,4-diyl)bis-, (Z)-	0.76623
Benzene, 1,1'-(1-methyl-1,3-propanediyl)bis-	0.75304
Benzene, 1,1'-(1-butene-1,4-diyl)bis-, (Z)-	0.73825
Benzene, [3-(diphenylmethylene)cyclopentyl]-	0.67697
Benzene, cyclopropyl-	0.61152
Benzene, [3-(diphenylmethylene)cyclopentyl]-	0.56788
Benzene, (1-methylenepropyl)-	0.55096
Benzene, (1-methylethyl)-	0.5005
Benzene, 1,1',1'',1'''-(1,2,3,4-butanetetrayl)tetrakis-	0.44928
Benzene, 1,1'-(1,3-propanediyl)bis-	0.41465
benzene, 1,1'-(1-methylene-1,2-ethanediyl)bis-	0.32272
Benzene, 1,1'-(1,2-dimethyl-1,2-ethanediyl)bis-, (R*,S*)-	0.30298
Benzene, cyclopropyl-	0.22786
1,2-Dihydro-3-phenylnaphthalene	0.22151
Benzene, propyl-	0.20913
Benzene, 1,1'-[1-(2-propenyl)-1,2-ethanediyl]bis-	0.18697
Benzene, 1,1'-(1,4-butanediyl)bis-	0.1827
Benzenecarboximidoyl bromide, N-methyl-	0.17365
Benzene, 1,1'-(1-butene-1,4-diyl)bis-, (Z)-	0.16255
Benzene, 1-propynyl-	0.15977
4-Methoxy-1,3-benzenediol	0.15498

Benzene, 1,1'-(1-butene-1,4-diyl)bis-, (Z)-	0.15012
Naphthalene	0.14423
Benzene, (1-methylenebutyl)-	0.13525
1,2-Dihydro-3-phenylnaphthalene	0.13178
Indane	0.13117
Benzene, 1,1'-(1,3-propanediyl)bis-	0.12296
Benzene, 1,1'-(1-butene-1,4-diyl)bis-, (Z)-	0.10409
Naphthalene, 1,2-dihydro-1-phenyl-	0.10257
Benzene, 1-ethynyl-4-methyl-	0.10036
Benzene, 1,2,3-trimethoxy-5-methyl-	0.09312
Benzene, 3-butenyl-	0.08842
Naphthalene, 2-methyl-	0.08324
Naphthalene, 2-methyl-	0.07835
Benzene, 1,1'-(3-methyl-1-propene-1,3-diyl)bis-	0.07488
Benzene, 1,1'-(1,2-dimethyl-1,2-ethanediyl)bis-, (R*,S*)-	0.06674
1,4-Dimethyl-2-phenyl-naphthalene	0.06634
Benzene, 1,1'-(1,2-dimethyl-1,2-ethanediyl)bis-, (R*,S*)-	0.06594
Benzenecarbothioic acid,S-propyl ester	0.06479
Benzene, 1,1',1'',1'''-(1,5-hexadiene-1,3,4,6-tetrayl)tetrakis-	0.06294
Benzene, 1-hexynyl-	0.06208
Naphthalene, 1,2-dihydro-	0.05631
Naphthalene, 2-(phenylmethyl)-	0.05465
1,3-Benzenediol, monobenzoate	0.0427
Benzene, 1,1'-(1-butene-1,4-diyl)bis-, (Z)-	0.0385
1,2,3-Trimethoxybenzene	0.03362
1,4-Benzenediamine, N,N-dimethyl-	0.03019
Benzenecetaldehyde, .alpha.-methyl-	0.02994
Naphthalene, 2,6-dimethyl-	0.02653
Benzene, (2-methylbutyl)-	0.02353
1,2-Benzenediol, O-(4-butylbenzoyl)-O'-(isobutoxycarbonyl)-	0.0234
Benzene, 1,2,3-trimethyl-	0.02307
Benzene, 1-methyl-4-butyl	0.02228
Benzene, 4-ethenyl-1,2-dimethyl-	0.02176
1,3-Benzenediol, o-(2-methoxybenzoyl)-o'-ethoxycarbonyl-	0.0204
Naphthalene, 1,2-dimethyl-	0.01975
Benzenemethanol, .alpha.-methyl-.alpha.-(1-methyl-2-propenyl)-	0.01955
Benzene, 1,1',1'',1'''-(1,5-hexadiene-1,3,4,6-tetrayl)tetrakis-	0.01755
Naphthalene, 1,6-dimethyl-	0.01525
Benzene, 1,2,3-trimethyl-	0.01519
Benzene, 1-methoxy-4-propyl-	0.01487
1,3-Benzenediol, 4,5-dimethyl-	0.01434
1,4-Benzenediol, 2-methoxy-	0.01336

Benzene, 4-ethenyl-1,2-dimethyl-	0.01293
Benzene, hexyl-	0.0127
1,2,3-Trimethoxybenzene	0.01226
Benzenhexanenitrile, .beta.,.beta.-dimethyl-.epsilon.-oxo-	0.01219
1,4-Benzenediol, 2-methoxy-	0.01101
o-Phenylene benzenboronate	0.01086
1,2-Benzenediol, o-(4-methoxybenzoyl)-o'-(4-methylbenzoyl)-	0.0108
Benzene, 1,1'-(1,5-hexadiene-1,6-diyl)bis-	0.01066
1,2-Benzenediol, O-acetoxyacetyl-O'-(4-butylbenzoyl)-	0.01054
1,3-Benzenediol, o-(2-methoxybenzoyl)-o'-ethoxycarbonyl-	0.00976
Benzene, 1,1'-(1,2-dimethyl-1,2-ethanediyl)bis-, (R*,S*)-	0.00955
1,2-Benzenediol, O,O'-di(4-butylbenzoyl)-	0.00898
Naphthalene, 2-(phenylmethyl)-	0.00896
Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, methyl ester	0.00662
Naphthalene, 1,4,6-trimethyl-	0.00582
Benzene	0.00508
Naphthalene, 2-(phenylmethyl)-	0.00484
1,2-Benzenediol, O-(4-butylbenzoyl)-O'-(isobutoxycarbonyl)-	0.00378
1,4-Dimethyl-6-phenyl-naphthalene	0.00325
1,4-Benzenediamine, N,N-dimethyl-	0.00196
1,2-Benzenediol, O-(2-furoyl)-O'-(pentafluoropropionyl)-	0.00157
2,3,4,6-Tetramethoxystyrene	0.00145
1,4-Dimethyl-6-phenyl-naphthalene	0.00094
Total Area (%)	41.6761
Compounds- Cyclo-oxygenated compounds	
Sample-PNS	
Compounds Name	Area (%)
1-Propene, 3-(2-cyclopentenyl)-2-methyl-1,1-diphenyl-	0.67554
2-Cyclopenten-1-one, 2-hydroxy-3-methyl-	0.58398
2-Cyclopenten-1-one, 3-ethyl-2-hydroxy-	0.54437
1,2-Diphenylcyclopropane	0.4802
3,10-Dioxatricyclo[4.3.1.0(2,4)]dec-7-ene, (1.alpha.,2.alpha.,4.alpha.,6.alpha.)-	0.2518
1-Propene, 3-(2-cyclopentenyl)-2-methyl-1,1-diphenyl-	0.16259
Tricyclo[3.2.1.0(2,,4)]oct-6-ene, 8-methylene-, (1.alpha.,2.alpha.,4.alpha.,5.alpha.)-	0.1021
Silane, cyclohexyldimethoxymethyl-	0.08944
2-Cyclohexen-1-one, 2-methyl-3-(2-methylpropoxy)-	0.08516
2-Hydroxy-3-propyl-2-cyclopenten-1-one	0.08268
2-Cyclopenten-1-one, 3-ethyl-	0.08108
1,3-Cyclopentanedione, 2-ethyl-2-methyl-	0.06164
1-(2-(3-Cyclohexenyl)ethyl)silatrane	0.05229

2-Cyclopenten-1-one, 2-hydroxy-	0.05113
2-Cyclopenten-1-one, 2,3-dimethyl-	0.04856
2-Cyclohexen-1-one, 4,4-dimethyl-	0.04838
1-Propanone, 1-cyclopropyl-	0.04635
1,2-Diphenylcyclopropane	0.04565
Bicyclo[5.2.1]decan-10-one	0.03343
2-Cyclopenten-1-one, 2-hydroxy-3,4-dimethyl-	0.03339
1H-Cyclopenta[1]phenanthrene, 2,3-dihydro-	0.03208
Cyclopropane, 1,2-dimethyl-1-pentyl-	0.02896
Cyclopentane, 1-ethyl-1-methyl-	0.02724
15H-Cyclopenta[a]phenanthrene, 16,17-dihydro-3-(1-methylethyl)-	0.02463
Cyclopropanecarboxamide, N-benzyl-N-phenethyl-	0.02084
2,3-Dihydro-1-ethyl-1H-cyclopenta[b]quinoxaline	0.01686
2-Cyclopenten-1-one, 2-methyl-	0.0164
2,5,5-Trimethylcyclohex-2-enone	0.01636
Cyclooctasiloxane, hexadecamethyl-	0.01606
1-(2-(3-Cyclohexenyl)ethyl)silatrane	0.01181
Ethoxycyclohexyldimethylsilane	0.01041
8,9-Dihydrocyclopenta[def]phenanthrene	0.00997
Cyclopentasiloxane, decamethyl-	0.00993
Tetracosamethyl-cyclododecasiloxane	0.00938
Cyclotetrasiloxane, octamethyl-	0.00596
Cyclononasiloxane, octadecamethyl-	0.00565
Cyclotrisiloxane, hexamethyl-	0.00562
Cyclohexasiloxane, dodecamethyl-	0.0041
2,7-Dihydroxy-2,4,6-cycloheptatrien-1-one	0.00123
Total Area (%)	3.8333
Sample-PNS+PS (30 wt.%)	
1,2-Diphenylcyclopropane	1.71302
1-Propene, 3-(2-cyclopentenyl)-2-methyl-1,1-diphenyl-	1.66487
1H-Cyclopenta[1]phenanthrene, 2,3-dihydro-	0.47453
1-Propene, 3-(2-cyclopentenyl)-2-methyl-1,1-diphenyl-	0.47419
1,2-Diphenylcyclopropane	0.35311
1H-Cyclopenta[1]phenanthrene, 2,3-dihydro-	0.20804
2-Cyclopenten-1-one, 3-ethyl-2-hydroxy-	0.13808
Methyl 2-tetrahydrofuroate	0.13327
2-Cyclopenten-1-one, 2-methyl-	0.13175
2-Cyclopenten-1-one, 2,3-dimethyl-	0.12968
2-Cyclopenten-1-one, 3-methyl-	0.11749
2-Cyclopenten-1-one, 3-ethyl-2-hydroxy-	0.10029
7-Hydroxy-7,8,9,10-tetramethyl-7,8-dihydrocyclohepta[d,e]naphthalene	0.08461

15H-Cyclopenta[a]phenanthrene, 16,17-dihydro-3-(1-methylethyl)-	0.07845
2-Cyclopenten-1-one, 3,4-dimethyl-	0.06744
Cyclopentane, 1,1,3-trimethyl-	0.06712
2-Cyclopenten-1-one, 2,3-dimethyl-	0.06622
Cyclopentanone	0.05833
2-Cyclopenten-1-one, 2,3,4-trimethyl-	0.05236
1-Methyl-1-phenylcyclobutane	0.04753
1-Propene, 3-(2-cyclopentenyl)-2-methyl-1,1-diphenyl-	0.04377
2-Cyclopenten-1-one, 2,3,4-trimethyl-	0.0434
2-Hydroxy-3-propyl-2-cyclopenten-1-one	0.04182
1,2-Diphenylcyclopropane	0.02949
Tricyclo[10.2.2.2(5,8)]octadeca-5,7,12,14,15,17-hexaene	0.02532
2-Cyclopenten-1-one, 2-hydroxy-3,4-dimethyl-	0.02275
2-Cyclopenten-1-one, 3,4-dimethyl-	0.01859
Pyrene, 4,5,9,10-tetrahydro-	0.01558
2-Cyclohexen-1-one	0.01347
Bicyclo[4.2.0]octa-1,3,5-triene, 7-bromo-	0.01149
Benzamide, N-(5,6,7,8-tetrahydro-7,7-dimethyl-2,5-dioxo-4-2H-benzopyranyl)-	0.00982
1,4-Cyclohex-2-enedione	0.00885
2-Cyclohexen-1-one, 3,5-dimethyl-	0.00745
1-(2-(3-Cyclohexenyl)ethyl)silatrane	0.00597
1-Propanone, 1-cyclopropyl-	0.00559
1-(2-(3-Cyclohexenyl)ethyl)silatrane	0.00534
Cyclotetrasiloxane, octamethyl-	0.00522
Glycine, 2-cyclohexyl-N-(but-3-yn-1-yl)oxycarbonyl-, decyl ester	0.00451
Cyclobutylcarboxamide, N-(4-phenoxyphenyl)-	0.004
Cyclopropane	0.00387
Vanadium, (.eta.7-cycloheptatrienylium)(.eta.5-2,4-cyclopentadien-1-yl)-	0.00313
Cyclopentasiloxane, decamethyl-	0.00293
Cyclohexasiloxane, dodecamethyl-	0.00217
2-Cyclohexen-1-one, 3,5-dimethyl-	0.00198
Cyclopentene, 3-methylene-2-phenyl-1-(trimethylsilyl)oxy-	0.00077
Total Area (%)	6.49767
Sample-PNS+PS (30 wt.%)+CuO (5 wt.%)	
1,2-Diphenylcyclopropane	1.839
1H-Cyclopenta[l]phenanthrene, 2,3-dihydro-	0.9004
1-Propene, 3-(2-cyclopentenyl)-2-methyl-1,1-diphenyl-	0.82932
Tetracyclo[16.3.1.1(4,8).1(11,15)]tetracos-1(22),4,6,8(24),11,13,15(23),18,20-nonaene	0.72001
1,2-Diphenylcyclopropane	0.48518

1H-Cyclopenta[1]phenanthrene, 2,3-dihydro-	0.31476
2-Cyclopenten-1-one, 3-methyl-	0.19243
15H-Cyclopenta[a]phenanthrene, 16,17-dihydro-3-(1-methylethyl)-	0.1709
Methyl 2-tetrahydrofuroate	0.16788
2-Cyclopenten-1-one, 2-methyl-	0.15963
2-Oxobicyclo(3.2.2)nona-3,6-dien-1-yl benzoate	0.11925
2-Cyclopenten-1-one, 2,3-dimethyl-	0.1186
Cyclopentane, 1,1,3,4-tetramethyl-, trans-	0.10117
Methyl 2-tetrahydrofuroate	0.09866
2-Cyclopenten-1-one, 2,3-dimethyl-	0.09212
2-Cyclopenten-1-one, 2,3-dimethyl-	0.08413
2-Oxobicyclo(3.2.2)nona-3,6-dien-1-yl benzoate	0.07573
2-Cyclopenten-1-one, 2-hydroxy-3,4-dimethyl-	0.05988
1,2,3,4-Tetrahydro-2,3-dimethylquinoxaline	0.05527
2-Hydroxy-3-propyl-2-cyclopenten-1-one	0.05116
1-Propene, 3-(2-cyclopentenyl)-2-methyl-1,1-diphenyl-	0.04793
2-Cyclopenten-1-one, 3,4-dimethyl-	0.04509
1,2,4-Cyclopentanetrione, 3-methyl-	0.04421
Furo(3,4-e)-1,3-benzodioxol-8(6H)-one, 6-(1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-isoquinolinyl)-,(R-(R*,S*))-	0.04087
2-Oxobicyclo(3.2.2)nona-3,6-dien-1-yl benzoate	0.03945
2-Cyclohexen-1-one	0.0331
2,4,6-Tris(1,1-dimethylethyl)-4-methylcyclohexa-2,5-dien-1-one	0.02938
2,4,6-Tris(1,1-dimethylethyl)-4-methylcyclohexa-2,5-dien-1-one	0.02507
2-Cyclohexen-1-one	0.02444
Cycloprop[a]indene, 1,1a,6,6a-tetrahydro-	0.02355
2-Cyclopenten-1-one, 2,3-dimethyl-	0.02314
2-Cyclopenten-1-one, 3,5,5-trimethyl-	0.0226
4,5,6,6a-Tetrahydro-2(1H)-pentalenone	0.01849
2-Cyclopenten-1-one, 2,3,4-trimethyl-	0.01606
Tetrahydrofurfuryl propionate	0.01227
Bicyclo[3.2.1]octane	0.00849
2-Cyclohexen-1-one, 3-methyl-	0.00655
1,4-Cyclohex-2-enedione	0.0052
Cyclotetrasiloxane, octamethyl-	0.0035
Cyclopentasiloxane, decamethyl-	0.00104
(2S,6R,7S,8E)-(+)-2,7-Epoxy-4,8-megastigmadiene	0.00099
Total	7.10691
Compounds- Furan based compounds	
Sample-PNS	

Compounds Name	Area (%)
Carbofuran	0.28794
Isoparvifuran	0.17809
2,2'-Bifuran, octahydro-	0.03863
Isoparvifuran	0.03478
2,2'-Bifuran	0.03208
2-Furancarboxaldehyde, 5-methyl-	0.0314
2,5-Furandicarboxaldehyde	0.03054
1(3H)-Isobenzofuranone	0.02985
2-Acetyl-2-methyltetrahydrofuran	0.02853
Furan, 3-phenyl-	0.0276
2,5-Furandicarboxaldehyde	0.01976
2,5-Furandicarboxaldehyde	0.0193
5-Methyl-2-(2-methyl-2-tetrahydrofuryl)tetrahydrofuran	0.01872
2(5H)-Furanone	0.01622
3,4-Divanillyltetrahydrofuran	0.01413
Ethanone, 1-(2-furanyl)-	0.0124
Furan, 2-methoxy-	0.01223
Furan, 2-methoxy-	0.01086
2-Acetyl-5-methylfuran	0.00968
Ethanone, 1-[6-hydroxy-2-(1-methylethenyl)-7-benzofuranyl]-	0.00786
Furan, 2,3,5-trimethyl-	0.00775
2-Acetyl-5-methylfuran	0.00698
1-Pentanone, 1-(2-furanyl)-	0.00598
Ethanone, 1,1'-(6-hydroxy-2,5-benzofurandiyl)bis-	0.00548
1-Pentanone, 1-(2-furanyl)-	0.00381
2,4(3H,5H)-Furandione	0.0012
Total	0.89179

Sample-PNS+PS (30 wt.%)

2-Furancarboxaldehyde, 5-methyl-	0.2583
Ethanone, 1-(2-furanyl)-	0.15388
Benzofuran, 2-methyl-	0.05948
Ethanone, 1-(2-furanyl)-	0.03347
1-Propanone, 1-(2-furanyl)-	0.03162
2-Acetyl-5-methylfuran	0.02752
Benzofuran	0.02288
Benzofuran, 2,3-dihydro-	0.01843
1-Pentanone, 1-(2-furanyl)-	0.01744
2(5H)-Furanone	0.0135
2-Methoxytetrahydrofuran	0.01334
2-Furancarboxaldehyde, 5-methyl-	0.01219

1-Pentanone, 1-(2-furanyl)-	0.01165
1-Propanone, 1-(5-methyl-2-furanyl)-	0.01072
Furan, 2,3-dihydro-	0.00835
Furan, 2-methoxy-	0.00808
1-Propanone, 1-(2-furanyl)-	0.0061
1-Propanone, 1-(2-furanyl)-	0.00573
Furan, 2-methoxy-	0.00515
2-Furancarboxaldehyde, 5-methyl-	0.00471
Isoparvifuran	0.00416
1-Propanone, 1-(5-methyl-2-furanyl)-	0.00371
1-Octanone, 1-(2-furanyl)-	0.0023
2-Acetyl-5-methylfuran	0.002
2-Acetyl-5-methylfuran	0.00195
Ethanone, 1-(2-furanyl)-	0.00166
4-Bromomethyl-5H-furan-2-one	0.00025
Total Area (%)	0.73857
Sample-PNS+PS (30 wt.%)+CuO (5 wt.%)	
Ethanone, 1-(2-furanyl)-	0.22882
Furan, 2-propyl-	0.09505
Benzofuran, 2-methyl-	0.08655
2-Furanmethanol, acetate	0.07605
1-Propanone, 1-(2-furanyl)-	0.05626
2-Acetyl-5-methylfuran	0.04578
2,5-Furandicarboxaldehyde	0.0388
Benzofuran	0.03801
2-Vinylfuran	0.03491
Ethanone, 1-(2-furanyl)-	0.03338
1-Pentanone, 1-(2-furanyl)-	0.03051
2-Furanone, 2,5-dihydro-3,5-dimethyl	0.0256
2-Furancarboxaldehyde, 5-methyl-	0.02352
Benzofuran, 2,3-dihydro-	0.02186
4-(6-Methoxy-3-methyl-2-benzofuranyl)-3-buten-2-one	0.02073
1-Propanone, 1-(5-methyl-2-furanyl)-	0.01916
Furan, 2-methoxy-	0.01778
2-Methoxytetrahydrofuran	0.01597
1,3-Isobenzofurandione, 3a,4,7,7a-tetrahydro-, trans-	0.01361
2,5-Furandione, 3-methyl-	0.01346
Benzofuran, 2-methyl-	0.01343
threo-2,5-Dimethyl-2-(2-methyl-2-tetrahydrofuryl)tetrahydrofuran	0.00995
1,3,5-Tri-O-benzoyl-.alpha.-d-ribofuranose	0.00932
2(3H)-Furanone, 5-methyl-	0.0074
2-Acetyl-5-methylfuran	0.00585
Ethanone, 1-(2-furanyl)-	0.0054

Isoparvifuran	0.00528
Naphtho[2,1-b]furan	0.00393
(3S,3aR)-3-Butyl-3a,4,5,6-tetrahydroisobenzofuran-1(3H)-one	0.00294
2-Acetyl-5-methylfuran	0.00282
1,6-Anhydro-.beta.-D-glucofuranose	0.00279
2-Acetyl-5-methylfuran	0.00182
Isoparvifuran	0.00159
Total Area (%)	1.00835
Compounds- Phenols	
Sample-PNS	
Compounds Name	Area (%)
Phenol, 2,6-dimethoxy-	5.31202
4-Ethyl-2,6-dimethoxyphenol	2.68828
2,4-Di-tert-butylphenol	1.06066
(E)-2,6-Dimethoxy-4-(prop-1-en-1-yl)phenol	1.00145
Phenol, 2,4-bis(1,1-dimethylethyl)-, phosphite (3:1)	0.87883
2,6-Dimethoxy-4-propylphenol	0.76857
Phenol, 2,6-dimethoxy-4-(2-propenyl)-	0.54724
(E)-2,6-Dimethoxy-4-(prop-1-en-1-yl)phenol	0.46516
Phenol, 4-ethyl-2-methoxy-	0.40281
(E)-2,6-Dimethoxy-4-(prop-1-en-1-yl)phenol	0.39446
2-Methoxy-5-propylphenol	0.36592
Phenol, 4-ethenyl-2,6-dimethoxy-	0.1793
Phenol, 2-methoxy-	0.16602
Phenol, 2,4-dimethyl-	0.16497
Phenol, 3,4,5-trimethyl-	0.12704
Phenol, 3,4-dimethyl-	0.10089
Phenol, 3-ethyl-5-methyl-	0.09783
Phenol, 4-ethyl-2-methoxy-	0.07942
Phenol, 2-methoxy-4-(1-propenyl)-, acetate	0.07573
Phenol, 2-ethyl-	0.07277
Phenol	0.07244
Phenol, 4-ethyl-2-methyl-	0.05437
Phenol, 3,5-dimethyl-	0.05434
2,3-Dimethoxyphenol	0.05389
(Z)-3-(Heptadec-10-en-1-yl)phenol	0.05019
4-(4-Hydroxy-3-methoxystyryl)-2,6-dimethoxyphenol	0.04889
Phenol, 4,4'-methylenebis[2,6-dimethoxy-	0.04401
Phenol, 4-ethyl-2-methyl-	0.0392
Phenol, 2,6-dimethoxy-, acetate	0.03763
Phenol, 3-pentadecyl-	0.033
phenol, 4-[[4-[(4-methoxyphenyl)amino]phenyl]amino]-	0.02561
Phenol, 3,5-diethyl-	0.01907

Phenol, 4-ethyl-2-methyl-	0.01691
Phenol, 2-propyl-, O-ethoxycarbonyl-	0.01641
Phenol, 3,5-dimethyl-	0.01132
Phenol, 2-methoxy-5-[(1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-isoquinoliny)methyl]-, (S)-	0.01068
3-Amino-2-fluorophenol, N,O-bis-acetyl	0.00781
4-(1-Piperazinyl)phenol	0.0073
Phenol, 3-methyl-5-(1-methylethyl)-, methylcarbamate	0.00432
Phenol, 4-methoxy-, acetate	0.00386
Total Area (%)	15.5606
Sample-PNS+PS (30 wt.%)	
2,3-Dimethoxyphenol	1.84616
4-Ethyl-2,6-dimethoxyphenol	1.06301
Phenol, 2-methoxy-	0.62453
Phenol, 4-ethyl-2-methoxy-	0.47135
Phenol, 2,4-bis(1,1-dimethylethyl)-, phosphite (3:1)	0.36381
Phenol, 2-methyl-	0.33777
Phenol, 2-methoxy-4-(2-propenyl)-, acetate	0.22245
Phenol, 2,6-dimethoxy-4-(2-propenyl)-	0.20569
Phenol	0.16362
2-Methoxy-4-vinylphenol	0.13612
Phenol, 3,5-dimethyl-	0.13054
Phenol, 3,5-dimethyl-	0.13022
(E)-2,6-Dimethoxy-4-(prop-1-en-1-yl)phenol	0.11189
2-Methoxy-5-propylphenol	0.09682
2-Methoxy-5-methylphenol	0.09067
Phenol, 3,4-dimethyl-	0.08101
2-Methoxy-5-methylphenol	0.05686
Phenol, 3,5-dimethyl-	0.05667
3-Tridecylphenol	0.0527
Phenol, 3,4-dimethyl-	0.04548
Phenol, 3,4-dimethoxy-	0.03595
Phenol, 4-ethyl-	0.03562
(Z)-3-(Heptadec-10-en-1-yl)phenol	0.03513
Phenol, 4-ethyl-2-methyl-	0.03435
Phenol, 2,6-dimethoxy-, acetate	0.02257
Phenol, 3-pentadecyl-	0.02181
3-Methoxyphenol, TMS derivative	0.02143
Phenol, 4-ethyl-2-methyl-	0.02137
Phenol, 4-ethyl-2-methyl-	0.0155
Phenol, 4-ethyl-2-methyl-	0.01269
Phenol, 4-propyl-	0.00844
Phenol, 4,4'-methylenebis[2,6-dimethoxy-	0.00361

Phenol	0.00143
Total Area (%)	6.55729
Sample-PNS+PS (30 wt.%)+CuO (5 wt.%)	
Phenol, 2,6-dimethoxy-	2.26371
Phenol, 2-methoxy-	0.70608
Phenol, 4-ethyl-2-methoxy-	0.55732
Phenol, 3,4-dimethyl-	0.2623
2,4-Di-tert-butylphenol	0.26156
Phenol	0.2305
Phenol, 3,5-dimethyl-	0.20311
2-Methoxy-4-vinylphenol	0.20091
Phenol, 2-ethyl-	0.16556
2-Methoxy-5-propylphenol	0.15036
3-Tridecylphenol	0.09716
2-Methoxy-5-methylphenol	0.09127
Phenol, 4-ethyl-	0.08566
Phenol, 3,5-dimethyl-	0.07847
Phenol, 4-ethyl-2-methyl-	0.07835
Phenol, 3,4-dimethoxy-	0.0722
Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-, methylcarbamate	0.06799
Phenol, 4-ethyl-	0.06207
Phenol	0.05495
Phenol, 4-ethyl-2-methyl-	0.03057
Phenol, 4-ethyl-2-methyl-	0.02563
2,3-Dimethoxyphenol	0.02521
Phenol, 4-ethyl-2-methyl-	0.0245
N-Phenylpropadienyl-3-phenolamine	0.01511
Phenol, 2-(3-hydroxy-3-methyl-1-butenyl)-, (Z)-	0.01396
Phenol, 4-ethyl-2-methoxy-	0.013
Phenol, 2-methoxy-, acetate	0.01208
2,6-Bis(tert-butyl)phenol, TMS derivative	0.00536
Phenol, 2-methoxy-	0.00299
Phenol, 4-propoxy-	0.00193
Phenol	0.00126
phenol, 4-[[4-[(4-methoxyphenyl)amino]phenyl]amino]-	0.00104
Total Area (%)	5.86218
Compounds- Nitrogen containing compounds	
Sample-PNS	
Compounds Name	Area (%)
4-Nitropyridine	0.23745
(+)-N-Benzyl-alpha-methyl-N-nitrosobenzylamine	0.22621
Propanedinitrile, cyclohexyl(2-methylcyclohexyl)-	0.16127
Pyrazine, 2-ethyl-6-methyl-	0.14644

2,3-Dimethoxy-5-aminocinnamionitrile	0.06601
Pyridine, 2-(2-(4-methoxyphenyl)ethenyl)-, trans-	0.0566
Methylenedioxyamphetamine, N-4-carbethoxyhexafluorobutyryl deriv.	0.0526
3-Methyl-1H-pyrazin-2-one, TBDMS derivative	0.04504
2,3-Diazabicyclo[2.2.1]hept-2-ene, 1,4-diphenyl-, N-oxide	0.04295
2-Fluorobenzylamine, N,N-didecyl	0.0414
1,2-Bis(4-methoxyphenyl)ethane-1,2-diamine	0.04086
Phenyl-1,2-diamine, N,4,5-trimethyl-	0.03927
Pyridine, 2-(2-(4-methoxyphenyl)ethenyl)-, trans-	0.03508
2-Methoxybenzylamine, N-tert-butyldimethylsilyl-	0.02976
Cyclopropanecarbohydrazide	0.02796
Propanal, 2-propenylhydrazone	0.02776
3-Phenyl-2-propynenitrile	0.02653
2-Furoylacetonitrile	0.0199
Benzaldehyde, propylhydrazone	0.01826
Acetonitrile-d3	0.01817
3-Hydroxybenzoyl 2-nitrobenzylidenehydrazide	0.0177
4-Azaspiro[2.5]octane, N-acetyl-	0.01555
2,3-Dihydro-7-methoxy-4-methyl-1H-1,5-benzodiazepin-2-one	0.01397
Thiophen-2-methylamine, N-decyl-N-methyl	0.01355
1-(2,4-Dihydroxyphenyl)-2-(4-nitrophenyl)ethanone	0.01307
3-Hydroxymethyl-piperazine-2,5-dione	0.01247
Azetidine	0.01003
4-(4-Methylaminobenzylideneamino)benzonitrile	0.00905
Pyrazine, 2-methyl-5-(1-methylethyl)-	0.00875
2-Methylbenzylamine, N,N-dinonyl-	0.00805
3(2H)-Pyridazinone	0.00785
2-Phenyl-8-methyl-4H-imidazo(2,1-c)(1,4)benzoxazine	0.00552
1-Adamantylamine, N-tert-butyldimethylsilyl-	0.00533
Acetonitrile, ethoxy-	0.00445
m-Anisic hydrazide	0.00439
1-Oxa-3,4-diazacyclopentadiene	0.00422
3,5-Dimethylbenzylhexylamine	0.00374
1,2-Bis(3,5,5-trimethyl-2-cyclohexenylidene)hydrazine	0.00307
Ethylamine, N,N-dinonyl-2-(2-thiophenyl)-	0.00056
Total Area (%)	1.52087
Sample-PNS+PS (30 wt.%)	
propanedinitrile, 2-[3-(phenylamino)-2-propen-1-ylidene]-	0.84798
2,3-Diazabicyclo[2.2.1]hept-2-ene, 1,4-diphenyl-	0.53855
2,3-Diazabicyclo[2.2.1]hept-2-ene, 1,4-diphenyl-	0.23964
Azetidine, 3-methyl-3-phenyl-	0.15498
2,3-Diazabicyclo[2.2.1]hept-2-ene, 1,4-diphenyl-, N-oxide	0.11192

Pyrazine, isopropenyl-	0.04227
Benzenamine, 2-iodo-	0.03626
Difluoramine	0.03018
3-Methyl-1H-pyrazin-2-one, TBDMS derivative	0.02994
Dibenzylamine, N-nitro-	0.02613
8-Azabicyclo[5,2,0]nonan-9-one	0.02306
5-methyl-2-pentylpyridine	0.02054
Pyridine, 2-(2-(4-methoxyphenyl)ethenyl)-, trans-	0.01621
Dibenzylamine, N-nitro-	0.01545
N-Cyclohexyl-2,2-diphenylacetamide	0.01513
3(2H)-Pyridazinone	0.01437
Phenyl-1,2-diamine, N,4,5-trimethyl-	0.01226
2-Fluoro-3-(2-furyl)-3-oxopropanenitrile	0.01224
4,6-Dimethyl-2-pyrimidinylhydrazine	0.01181
3,3-Diisopropyl-N-methylazetidin-2,4-dione	0.01116
N-Isopropylethylenediamine	0.01036
3,5-Dimethylbenzylhexylamine	0.00875
1H-1,3-Diazepine, 4,5,6,7-tetrahydro-2-methyl-	0.00685
Hexadecylamine, N-tert-butyldimethylsilyl-	0.00515
1,4-Benzodioxan-6-amine	0.00514
2-(4-Aminophenyl)propanenitrile	0.00477
Oxetan-3-amine, N-acetyl	0.00363
1-(2,4-Dihydroxyphenyl)-2-(4-methoxy-3-nitrophenyl)ethanone	0.00303
Ethylamine, N-ethyl-N-(3-methylphenyl)-2-(2-thiophenyl)-	0.00246
Benzenamine, N-(phenylmethylene)-	0.00217
Methylamine, N,N-dimethyl-	0.00214
1,2,4,5-Tetrazine	0.00124
3-Ethyl-2,6-diphenylpyridine	0.00099
1,2-Ethanediamine, N-ethyl-N'-methyl-	0.00088
3-Pyridinecarbonitrile, 1,4-dihydro-1-methyl-	0.00078
3-Trifluoromethylbenzylamine, N-decyl-N-methyl-	0.00058
Total Area (%)	2.26899
Sample-PNS+PS (30 wt.%)+CuO (5 wt.%)	
2,3-Diazabicyclo[2.2.1]hept-2-ene, 1,4-diphenyl-	0.58776
3-Methyl-1H-pyrazole-4-carbaldehyde	0.26344
Benzaldehyde, 4-benzyloxy-3-methoxy-2-nitro-	0.2025
3-Methyl-1H-pyrazole-4-carbaldehyde	0.19182
Dibenzylamine, N-nitro-	0.17848
3-Methyl-1H-pyrazin-2-one, TBDMS derivative	0.13726
1-(1,3-Dimethyl-1H-pyrazol-4-yl)ethanone	0.11602
1H-Benzimidazole, 1-(2-phenylethenyl)-, (E)-	0.10066
N-Cyclohexyl-2,2-diphenylacetamide	0.09988
3-Aminopyrazole	0.08224

Betazole	0.08111
Benzonitrile, 4-(dimethylamino)-	0.06354
4-Cyano-2-isopropylpyridine	0.04864
Pyrazine, isopropenyl-	0.04285
1-Methyl-2-propyl-pyrazolium bromide	0.03964
1-(1,3-Dimethyl-1H-pyrazol-4-yl)ethanone	0.03796
N-Cyclohexyl-2,2-diphenylacetamide	0.0377
Pyrazine, 2-methyl-5-(1-methylethyl)-	0.03533
4-Formyl-3,5-dimethyl-1H-pyrrole-2-carbonitrile	0.03105
Benzaldehyde, 4-benzyloxy-3-methoxy-2-nitro-	0.03099
Tetrafluorohydrazine	0.03074
3-Methyl-1,2-diazirine	0.0266
N-Cyclohexyl-2,2-diphenylacetamide	0.02574
3,3-Diisopropyl-N-methylazetidin-2,4-dione	0.02443
1,5-Dimethyl-2-pyrrolicarbonitrile	0.02387
1H-Pyrazole, 3-ethyl-4,5-dihydro-	0.02371
Pyridine, 3-methyl-2,6-diphenyl-	0.02294
1H-Benzimidazole, 1-(2-phenylethenyl)-, (E)-	0.0221
1,2-Dimethylbenzimidazole	0.02153
Pyrazine, 2,6-diethyl-	0.02089
8-Azabicyclo[5,2,0]nonan-9-one	0.01905
N-(2-Cyano-1-methylvinyl)acetamide	0.01814
Pyridine, 3-methyl-2,6-diphenyl-	0.01677
Acetamide, N-methyl-	0.01631
4-Anilinoquinazoline	0.01587
2,5,6-Trimethylbenzimidazole	0.01564
5-(4-Iodo-phenylamino)-thiazolidine-2,4-dione	0.01434
4-Quinolinamine, N,N-dimethyl-	0.01397
1,2,4,5-Tetrazine	0.0133
1H-Benzimidazole, 5,6-dimethyl-	0.01297
4-Methoxy-o-phenylenediamine	0.01248
5H-Oxazolo[3,2-a]pyridine-8-carbonitrile, 6-ethyl-2,3-dihydro-2,7-dimethyl-5-oxo-	0.01172
2H-imidazole-2-thione, 1,3-dihydro-1-methyl-5-(1-methylethyl)-	0.01158
2-Propenenitrile	0.01157
1H-Benzimidazole, 2-methyl-	0.01127
Benzenamine, 2,3,4,5-tetramethyl-	0.01124
N-Methylpyrimidin-2-amine	0.01019
3-Pyridinecarbonitrile, 1,4-dihydro-1-methyl-	0.00957
3-Methyl-1H-pyrazole-4-carbaldehyde	0.00827
Benzenamine, 4-(6-methyl-2-benzothiazolyl)-	0.00798
2,3-Dihydro-1H-pyrazol-3-one, 2Me derivative (isomer 2)	0.00748
3-Methyl-pyrrolo(2,3-b)pyrazine	0.0072

Pyrazine, ethyl-	0.00707
4,6-Dimethyl-2-pyrimidinylhydrazine	0.00684
1,5-Dimethyl-2-pyrrolicarbonitrile	0.00678
4-Methylcarbazole	0.00667
Imidazole, 4-fluoro-	0.0062
3,4-Methylenedioxyamphetamine, N-benzoyl-	0.00581
2,5,6-Trimethylbenzimidazole	0.00554
2-Amino-3-methylpyridine-N-oxide	0.00529
1H-Benzimidazole, 2-(1,1-dimethylethyl)-	0.00482
3(2H)-Pyridazinone	0.00478
Pyrazine, 2,6-diethyl-	0.00472
1H-Pyrazole, 4,5-dihydro-3-methyl-	0.00455
Pyrazine, isopropenyl-	0.00452
2,5,6-Trimethylbenzimidazole	0.00378
2-Hydroxy-3-aminomethylpyridine	0.00328
2,5,6-Trimethylbenzimidazole	0.00309
Propiolonitrile	0.00289
1H-Benzimidazole, 2-(1,1-dimethylethyl)-	0.00278
2-(Furan-2-yl)-7-(4-methoxyphenyl)-[1,2,4]triazolo[1,5-a]pyrimidine	0.00272
1,2,4-Triazin-5(2H)-one, 3,4-dihydro-6-(2-aminophenyl)-3-thioxo-	0.00237
3-Pyridinecarbonitrile, 1,4-dihydro-1-methyl-	0.00231
Pyridine, 3-phenyl-	0.00226
1H-Benzimidazole, 1-(2-phenylethenyl)-, (E)-	0.0018
2-Phenazinecarbonitrile, 7-amino-	0.00116
1,2-Ethanediamine, N-ethyl-N'-methyl-	0.0007
1-Propanamine, 3-dibenzo[b,e]thiepin-11(6H)-ylidene-N,N-dimethyl-, S-oxide	0.00057
2,6-Bis[4-cyanostyryl]pyridine	0.00028
Total Area (%)	3.03185
Compounds- Others	
Sample-PNS	
Compounds Name	Area (%)
Dibutyl phthalate	5.38971568
Naphthalene, 1,2,3,4-tetrahydro-2-phenyl-	2.35087303
Syringylacetone	2.33443012
Syringylacetone	1.52897169
Ethanone, 1-(4-hydroxy-3,5-dimethoxyphenyl)-	1.09332006
2,5-Dihydroxy-4-methoxyacetophenone	0.87527058
2-Propanone, 1-(4-hydroxy-3-methoxyphenyl)-	0.76583135
Valylvaline, N,N'-dimethyl-N'-propargyloxycarbonyl-, isohexyl ester	0.75035008
13-Docosenamide, (Z)-	0.66194859

Benzaldehyde, 4-hydroxy-3,5-dimethoxy-	0.63312456
Ethanone, 1-(4-hydroxy-3,5-dimethoxyphenyl)-	0.60121602
Butylsyringone	0.59157514
Furfural	0.57570386
m,m-Quaterphenyl	0.54104543
2H-1-Benzopyran-2-one, 3,4-dihydro-6-hydroxy-	0.50353188
1-(2,4-Dihydroxyphenyl)-1-butanone	0.49684374
2,5-Dihydroxy-4-methoxyacetophenone	0.42069401
Benzaldehyde, 4-hydroxy-3,5-dimethoxy-	0.3550853
2,3-Diketo-6-methoxybenzo[b]pyran	0.34897713
Squalene	0.34716216
Ethanone, 1-(3-hydroxy-4-methoxyphenyl)-	0.33242613
1H-Indene, 1-(phenylmethylene)-	0.32031201
1-Propanone, 1-(4-hydroxy-3,5-dimethoxyphenyl)-	0.31420496
Silane, dimethoxymethylphenyl-	0.30779851
Bis(trimethylsilyl) methylphosphonate	0.30463282
trans-Sinapaldehyde	0.2741325
1-Nonadecene	0.27198013
Dihydrosyringenin	0.27171243
Pentadecane, 2,6,10,14-tetramethyl-	0.26608266
Coniferyl aldehyde	0.25816552
Naphthalene, 2-(phenylmethyl)-	0.24720472
3-Acetyl-2,5-dimethylthiophene	0.23969192
Hexadecane, 2,6,11,15-tetramethyl-	0.22948705
Dodecane, 4,6-dimethyl-	0.22500576
Ethanone, 1-(2,5-dihydroxyphenyl)-	0.21961134
Hexadecane, 2,6,11,15-tetramethyl-	0.211095
7-Hydroxycoumarin	0.20638552
1H-Indene, 1-(phenylmethylene)-	0.19570142
1-Nonadecene	0.19305208
3,5-Dimethoxy-4-hydroxycinnamaldehyde	0.19022412
Dodecane, 4,6-dimethyl-	0.18911872
Dihydrosyringenin	0.18307226
Ethanone, 1-(2,4-dihydroxyphenyl)-	0.18219484
Methylparaben	0.17690272
Hexadecane, 2-methyl-	0.17044046
3-Buten-1-one, 1,4-diphenyl-	0.1668624
Dodecane, 4,6-dimethyl-	0.16560741
Coniferyl aldehyde	0.15176307
Dodecane, 4,6-dimethyl-	0.1462554
3,4,5-Trihydroxyphthalaldehyde	0.1398089
Glycine, N-(2-fluorobenzoyl)-, propyl ester	0.13588843
Ethanone, 1-(2-hydroxyphenyl)-	0.13575123

Hexadecane, 2,6,10,14-tetramethyl-	0.13244642
2',4'-Dihydroxypropiophenone	0.12654179
Heneicosane	0.12576743
1H-Inden-1-one, 2,3-dihydro-	0.1257253
Undecane, 3,8-dimethyl-	0.12001781
4H-1-Benzopyran-4-one, 2,3-dihydro-6-methyl-	0.11913805
Decane, 3,8-dimethyl-	0.10757646
(E)-3,3'-Dimethoxy-4,4'-dihydroxystilbene	0.10571529
2,5-Diphenyl-1,5-hexadiene	0.10451319
Decane, 3,8-dimethyl-	0.09731542
Phlorobutyrophenone	0.09607289
Dodecane, 4,6-dimethyl-	0.09370488
p-Terphenyl	0.0931395
5-Trimethylsilylpent-2-en-4-yne	0.08969004
Propanal, 2-(phenylmethoxy)-	0.08908214
Hexacosane, 1-iodo-	0.08570415
Decane, 3-ethyl-3-methyl-	0.08447401
Dihexyverine	0.08309388
Isophthalaldehyde	0.08290727
1H-Indene-1,2-dione, 3-phenyl-2,3-dihydro-	0.08140681
Undecane, 3,7-dimethyl-	0.07734177
Hexadecane, 2,6,10,14-tetramethyl-	0.07698547
Undecane, 3,8-dimethyl-	0.07658358
Tetradecane, 2-methyl-	0.07619929
Tridecane, 1-iodo-	0.07378594
1,1':2',1''-Terphenyl, 4'-phenyl-	0.07302926
5-n-Propylhydantoin	0.07082795
2-Isopropyl-10-methylphenanthrene	0.07049258
(E)-Stilbene	0.06929622
1,2-Dihydro-3-phenylnaphthalene	0.06583028
l-Alanine, N-(2-fluorobenzoyl)-, methyl ester	0.06577338
Nonane, 2-methyl-5-propyl-	0.06546662
1-(4-Methylphenyl)-4-phenylbuta-1,3-diene	0.06415933
Decane, 2,3,7-trimethyl-	0.06405404
2,3-Butanedione	0.06367743
5,5-Dibutylnonane	0.06324079
Silicon tetrafluoride	0.06167281
5-Acetoxymethyl-2-furaldehyde	0.05701101
6H-Purin-6-one, 1,7-dihydro-	0.05365477
1,1'-Biphenyl, 4-pentyl-	0.05088726
Naphthalene, 2-methyl-	0.04904166
3-Acetyl-2,5,6-trimethylhydroquinone	0.04838283
2-(4'-Methoxyphenyl)-2-(3'-methyl-4'methoxyphenyl)propane	0.04801592

Rebemide	0.04766557
Undecane, 3,8-dimethyl-	0.04727889
Decane, 2,3,6-trimethyl-	0.04709793
1H-Indene, 1-(phenylmethylene)-	0.0466657
4-Methyl-2H-pyran	0.0466226
1-Methylindan-2-one	0.04590177
Hexadecane, 2-methyl-	0.04482781
Ethanone, 1-(2,3-dihydro-1H-inden-5-yl)-	0.04282764
3-Methylbenzothiophene	0.04231519
Undecane, 3,8-dimethyl-	0.04125593
3-Acetyl-2,5,6-trimethylhydroquinone	0.04098174
Methylene chloride	0.04081042
Decane, 2,8,8-trimethyl-	0.0389803
Bis(trimethylsilyl) methylphosphonate	0.03822057
Methylene chloride	0.03712971
Ethyl 2-oxopentanoate	0.03639409
1,1'-Biphenyl, 5-hydroxy-3,4'-dimethoxy-	0.03610553
Decane, 3,3,5-trimethyl-	0.03602086
Naphthalene, 1,2-dihydro-1-phenyl-	0.03458245
6-Hepten-2-one, 7-phenyl-	0.03424142
Phenanthrene, 3,6-dimethyl-	0.03379279
Decane, 3,8-dimethyl-	0.03362917
4-Hexen-2-one	0.03338881
4,5-Dimethoxy-2-hydroxyacetophenone	0.03312214
2,5-Dihydroxy-4-methoxyacetophenone	0.031131
Benzophenone	0.0309469
Undecane, 4,4-dimethyl-	0.03028155
1,3-Butadiene, 1,4-diphenyl-, (E,E)-	0.03000402
Methyl dehydroabietate	0.02913351
2-Phenyl-5,6-dihydro-1,4-oxathiine	0.02892836
Ethanone, 1-(2,4,6-trihydroxyphenyl)-	0.02887161
1H-Indene-1,2-dione, 3-phenyl-2,3-dihydro-	0.02743359
Hexane, 3,3-dimethyl-	0.02725182
1,1'-Biphenyl, 6-hydroxy-4,2',3',4'-tetramethoxy-	0.02677691
Phosphorus pentafluoride	0.02660546
Etosexidine	0.02628712
1-Methylindan-2-one	0.02627002
Silane, 1,3-butadiynyltrimethyl-	0.02607942
1,5-Heptadiene, (E)-	0.02601655
Silane, methyldimethoxyisopropoxy-	0.02573981
2-Propen-1-one, 1,2-diphenyl-	0.02514191
2-Pentanone, 5-(acetyloxy)-	0.02481549
2',3',4' Trimethoxyacetophenone	0.02437051

3-Methylbenzothiophene	0.0242838
Benzaldehyde, 2,4-difluoro-3-hydroxy-	0.02351139
Naphthalene	0.02319281
Di-tert-butyl peroxide	0.02313606
Borane, diethyl(decyloxy)-	0.02297332
Ethanone, 1-(2-hydroxy-4-methoxyphenyl)-	0.0227424
Silane, dimethoxydimethyl-	0.02269311
Thymine	0.02239781
Silane, dimethyl(2-naphthoxy)hexadecyloxy-	0.02111542
Dibutyl phthalate	0.02092487
Diphenyl sulfone	0.02076885
2,6-Dihydroxybenzaldehyde	0.01931088
7-Chloro-1-(4-fluorophenyl)heptan-1-one	0.01918829
Tetrahydrofurfuryl propionate	0.01888397
Benzothiophene-3-carboxamide	0.0188421
Naphthalene, 2-(phenylmethyl)-	0.01831269
2-Hepten-4-one, 6-methyl-	0.01784473
7-Chloro-1-(4-fluorophenyl)heptan-1-one	0.01753526
Hexadecane, 2-methyl-	0.01738325
Acetophenone	0.01728088
2H-Pyran-2-one	0.01691343
Borane, diethyl(decyloxy)-	0.01676867
3',5'-Dihydroxyacetophenone	0.01664385
2,5-Dihydroxy-4-methoxyacetophenone	0.01625505
7H-Furo[3,2-g][1]benzopyran-7-one, 9-[(3-methyl-2-butenyl)oxy]-	0.01625434
Pyrene, 1,9-dimethyl-	0.01594689
Ethanone, 1-(2,3,4-trihydroxyphenyl)-	0.01492385
Benzaldehyde	0.01471375
Chloriodomethane	0.01461724
Nonane, 5-methyl-5-propyl-	0.01454256
1,3,5-Triphenyl-1,5-pentanedione	0.01430773
3,6-Dimethyl-4H-furo[3,2-c]pyran-4-one	0.0139618
Diphenyl sulfone	0.01393394
2-Propanone, 1-(acetyloxy)-	0.01391828
Noscapine	0.01379507
5-Ethyl-4-octanone	0.01343843
Acenaphthene	0.01290153
Glycine, N-(2-fluorobenzoyl)-, propyl ester	0.01283516
D-Alanine, N-(2-fluoro-5-trifluoromethylbenzoyl)-, decyl ester	0.01272638
3-Methylbenzothiophene	0.01269149
1,8-Naphthyridine, 2,4,7-trimethyl-	0.01268702
Sarcosine, N-(4-butylbenzoyl)-, propyl ester	0.01264252

1-(2,4-Dihydroxyphenyl)-2-(3,5-dimethoxyphenyl)propan-1-one	0.01253061
Benzaldehyde, 2-hydroxy-4-methoxy-	0.01223579
Monoisopropyl fumarate	0.01200395
N-Isobutyl(phenyl)methanesulfonamide	0.01135524
Fluridone	0.01120856
Benzo[b]thiophene, 2-ethyl-	0.0110563
4-Octen-3-one	0.01103913
Vinyl crotonate	0.01026679
2-Propanone, 1-hydroxy-	0.01021855
4,5-Dimethoxy-2-hydroxyacetophenone	0.01005922
Ethyl 4-(ethyloxy)-2-oxobut-3-enoate	0.01001647
Ethanone, 1-(2-hydroxy-6-methoxyphenyl)-	0.0098303
Naphthalene, 2-methyl-	0.00976948
Ethanone, 1-(2,3,4-trihydroxyphenyl)-	0.00932218
1,1'-Biphenyl, 4-pentyl-	0.00868488
2-Butanone	0.00831787
Silane, trimethyl(3-methylbutyl)-	0.00813467
Benzidine, 3,3'-dimethoxy-	0.00789257
6-Methyluracil	0.00738418
Benzo[b]thiophene-2-carboxaldehyde, 7-methyl-,	0.00725124
4-Amino-5-methyl-2-pyridone, TMS	0.00704841
2H-Pyrido[1,2-a]pyrimidin-2-one, 4,8-dimethyl-	0.00702637
1-(2-Thienyl)-1-propanone	0.00701995
Naphthalene, 1,7-dimethoxy-	0.00691516
Benzaldehyde, 2,4-difluoro-3-hydroxy-	0.00646083
p-Dioxin, 2,3-dihydro-5-methyl-	0.00619163
L-Leucine, N-methyl-N-(3-chloropropoxycarbonyl)-, tridecyl ester	0.00604017
l-Alanine, N-(2-furoyl)-, butyl ester	0.00568128
D-Alanine, N-(2-fluoro-3-trifluoromethylbenzoyl)-, decyl ester	0.0055845
Difenoxin	0.00513587
Hexane, 2,2,4-trimethyl-	0.00480204
Benzamide, 3-methyl-N-(2-ethylphenyl)-	0.00476838
4-Trimethylsilyl-9,9-dimethyl-9-silafluorene	0.0045546
3,6-Dimethyl-4H-furo[3,2-c]pyran-4-one	0.00446031
1,1'-Biphenyl, 3,3',4,4',5,5'-hexamethoxy-	0.0044534
4-Trimethylsilyl-9,9-dimethyl-9-silafluorene	0.00441034
4H-1-Benzopyran-4-one, 3-(3,4-dimethoxyphenyl)-6,7-dimethoxy-	0.00422494
2,4,6,(1H,3H,5H)-Pyrimidinetrione, 5-acetyl-	0.00407466
Acenaphtho[1,2-b]quinoxaline, 9-methoxy-	0.00400027
L-Valine, N-(2,6-difluoro-3-methylbenzoyl)-, tetradecyl ester	0.00381207
1,3,5-Trioxane	0.00371716

Methyl 3,5-dihydroxybenzoate, 2TMS derivative	0.00369291
Naphthalene, 2-phenyl-	0.00328655
1-Pentanone, 1-(4-methylphenyl)-	0.00325518
Benzo[b]thiophene-2-carboxaldehyde, 7-methyl-,	0.00292638
Propanal	0.00287311
Benzamide, 3-ethyl-N-(2-phenylethyl)-N-undecyl-	0.00271974
2-(4-Bromophenyl)-1-(2,4-dihydroxyphenyl)ethanone, 2TMS	0.00262622
Furfural	0.00245482
7-Chloro-1-(4-fluorophenyl)heptan-1-one	0.00221504
6H-Benzofuro[3,2-c][1]benzopyran, 3,9-dimethoxy-	0.00149607
1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3-phenyl-	0.00129903
4H-1-Benzopyran-4-one, 3-(3,4-dimethoxyphenyl)-6,7-dimethoxy-	0.00123712
Phloroglucinaldehyde, tris(trimethylsilyl) ether	0.00063126
Estrone, octanoate	8.1549E-05
Total Area (%)	34.2691265
Sample-PNS+PS (30 wt.%)	
2-Pentenal, 5-phenyl-	7.48096074
Difluoromethane	4.4804381
Furfural	3.54951061
1,1':3',1''-Terphenyl, 5'-phenyl-	1.83860238
Naphthalene, 1-phenyl-	1.12159085
Methyl N-(4-methylbenzyl)-N-(vinylsulfonyl)-L-serinate	0.87482949
1,5-Diphenyl-1,5-hexadiene	0.73358615
2,5-Diphenyl-1,5-hexadiene	0.70024438
Ethylene, 1,1-diphenyl-	0.69840023
1-(4-Methylphenyl)-4-phenylbuta-1,3-diene	0.54153591
Syringylacetone	0.4311345
1,2-Dihydro-3-phenylnaphthalene	0.36871559
Bibenzyl	0.34129703
(E)-Stilbene	0.33754488
m-Terphenyl	0.33055201
Homosyringaldehyde	0.31540738
Hex-1-ene,2,5-diphenyl-	0.29313129
Difluoromethane	0.28888537
1,3-Butadiene, 1,4-diphenyl-, (E,E)-	0.28413507
Diphenylmethane	0.26560168
1,4-Diphenyl-1,3-butadiene	0.22012543
Dodecane, 4,6-dimethyl-	0.21418999
Heneicosane	0.19311559
Dodecane, 4,6-dimethyl-	0.18324805
1,5-Diphenyl-1,5-hexadiene	0.17182665
Hexadecane, 2,6,11,15-tetramethyl-	0.16006422

1,4-Diphenylbut-3-en-2-one	0.15546226
Benzaldehyde, 4-hydroxy-3,5-dimethoxy-	0.15503699
1,1':2',1'':3'',1'''-Quaterphenyl	0.15398091
1,3-Butadiene, 1,4-diphenyl-, (E,E)-	0.15038931
Heneicosane	0.14213443
Heneicosane	0.13925087
Acetophenone	0.13891703
Dodecane, 4,6-dimethyl-	0.13842335
(E)-Stilbene	0.12507273
Nonane, 4,5-dimethyl-	0.12421626
Benzaldehyde	0.12328377
1,3-Pentadiene, 1,1-diphenyl-, (Z)-	0.12239396
2-Propanone, 1-(acetyloxy)-	0.11398604
1,2-Dihydro-3-phenylnaphthalene	0.11115494
Ethanone, 1-(3,4-dimethoxyphenyl)-	0.11090262
Decane, 1-iodo-	0.10984301
1H-Indene, 1-(phenylmethylene)-	0.10201693
1-Propanone, 1-(4-hydroxy-3,5-dimethoxyphenyl)-	0.09942989
1,3-Pentadiene, 1,1-diphenyl-, (Z)-	0.09821918
13-Docosenamide, (Z)-	0.09222966
Naphthalene, 2-(phenylmethyl)-	0.08712049
Silane, tetramethyl-	0.08623799
Hexadecane, 2,6,10,14-tetramethyl-	0.07589327
m-Terphenyl	0.07550316
3,5-Dimethoxy-4-hydroxycinnamaldehyde	0.07141593
9,10-Anthracenedione, 2-methyl-	0.06791282
2H-1-Benzopyran-2-one, 3,4-dihydro-6-hydroxy-	0.06759073
Dodecane, 4,6-dimethyl-	0.06733716
1,3-Pentadiene, 1,1-diphenyl-, (Z)-	0.06699533
Dodecane, 2,6,11-trimethyl-	0.06628475
1H-Inden-1-one, 2,3-dihydro-	0.06585575
1-Pentene, 1,5-diphenyl-	0.06492938
Phenanthrene, 2,5-dimethyl-	0.05670925
Decane, 2,4-dimethyl-	0.05198912
Naphthalene, 2-methyl-	0.05053616
2-Methylindene	0.04931425
Propionamide, 2,2-diphenyl-N-(2-pyridinyl)-	0.04843765
Anthracene, 2-methyl-	0.04756432
Dodecane, 4,6-dimethyl-	0.04734864
Dodecane, 4,6-dimethyl-	0.04652819
(E)-Stilbene	0.04617668
3-Ethyl-3-methylheptane	0.04539808
Nonane, 2,6-dimethyl-	0.04416241

Undecane, 3,8-dimethyl-	0.04403092
Dodecane, 2,7,10-trimethyl-	0.04366141
9-Ethyl-10-methylanthracene	0.04333214
Dodecane, 4,6-dimethyl-	0.04332206
Naphthalene	0.04262852
Supraene	0.04257731
Dodecane, 4,6-dimethyl-	0.04157689
Naphthalene, 1,2-dihydro-1-phenyl-	0.04094
3-Methylbenzothiophene	0.03769588
Dodecane, 4,6-dimethyl-	0.03659199
Naphthalene, 2-methyl-	0.03654094
9-Ethyl-10-methylanthracene	0.03559882
2,5-Dihydroxypropiophenone	0.03555555
2,3-Pentanedione	0.03530819
1,3,5-Triphenyl-1,5-pentanedione	0.03472649
Acenaphthene	0.03383368
Hexa-1,3,5-triene, 1,3,6-triphenyl-	0.03354245
l-Alanine, N-(2-furoyl)-, ethyl ester	0.03339795
Decane, 3,8-dimethyl-	0.03258542
2-Butanone, 1-(acetyloxy)-	0.0323495
4,5-Dimethoxy-2-hydroxyacetophenone	0.0321556
Decane, 1-iodo-	0.03204327
3,4,5-Trihydroxyphthalaldehyde	0.03181132
Bifenthrin	0.03133317
2-propanone, 1-phenyl-3-[(phenylmethyl)sulfonyl]-	0.03131303
Hexyl octyl ether	0.03112878
Heptadecane, 2-methyl-	0.03107025
3-Hexene-2,5-dione	0.03068345
Bifenthrin	0.03051029
Undecane, 3,8-dimethyl-	0.03011493
3-Acetyl-2,5,6-trimethylhydroquinone	0.02917306
9-Ethyl-10-methylanthracene	0.02815682
Methyl stearate	0.02814408
3',5'-Dihydroxyacetophenone	0.02804033
Dodecane, 4,6-dimethyl-	0.02706896
Triacontane	0.02694544
Naphthalene, 2-(phenylmethyl)-	0.02634355
Bis(trimethylsilyl) methylphosphonate	0.0263241
Octane, 2,6,6-trimethyl-	0.02622725
Tridecane, 3-methyl-	0.02598803
Phenanthrene, 2,3,5-trimethyl-	0.02569044
2-Thiophenecarboxaldehyde, 5-chloro-	0.02560335
3-Ethyl-3-methylheptane	0.02549307

2,5-Diphenyl-2,4-hexadiene	0.02533867
Naphthalene, 1,6-dimethyl-	0.02494068
Octadecane, 1-iodo-	0.02471783
1,4-Dimethyl-6-phenyl-naphthalene	0.02460021
1-Propanone, 1-phenyl-	0.02451547
Undecane, 3,8-dimethyl-	0.02394633
Dodecane, 4,6-dimethyl-	0.02127648
Methylene chloride	0.02107865
Naphthalene, 1,2-dihydro-	0.02060449
Hexane, 3,3-dimethyl-	0.01990767
Acridine, 9,10-dihydro-	0.01962339
3-Ethyl-2,6,10-trimethylundecane	0.01950324
Ethanone, 1-(3-hydroxyphenyl)-	0.01921267
Decane, 3-ethyl-3-methyl-	0.01902305
Acetoin	0.01832974
Heptane, 4-methylene-	0.01830708
1-Benzylamino-7-benzyloxy-heptane	0.0176991
Fluorene	0.01745889
1H-Indene, 2-phenyl-	0.01739707
Methylene chloride	0.01664357
Silane, dimethoxydimethyl-	0.01661329
Naphthalene, 2-(phenylmethyl)-	0.01637777
3-Ethyl-2,6,10-trimethylundecane	0.01623065
Nonane, 3,7-dimethyl-	0.01622891
Decane, 3-ethyl-3-methyl-	0.01611834
Ethanone, 1-(2-hydroxy-6-methoxyphenyl)-	0.01489904
1,1':4',1''-Terphenyl-, 3'-methyl-	0.01411089
1-Penten-3-one, 2-methyl-	0.01380927
Ethanone, 1-(3-hydroxyphenyl)-	0.01379391
Nonane, 1-iodo-	0.01378
9H-Fluorene, 2,3-dimethyl-	0.01366174
Hexane, 3,3-dimethyl-	0.01340446
Naphthalene, 1,2-dihydro-	0.01339359
9H-Fluorene, 9,9-dimethyl-	0.0133108
Homosyringaldehyde	0.01299877
Hexane, 2,4,4-trimethyl-	0.01291094
Cyanogen bromide	0.01286714
Boron, diethyl[3-imino-2-(1-iminoethyl)butanenitrilato-N2,N3]-, (t-4)-	0.01260846
1-Butene, 2,3-dimethyl-	0.01242326
Benzo[b]thiophene, 2-ethyl-	0.01217847
1-Ethylpropyl propylphosphonofluoridate	0.0121784
Heptane, 3,3,5-trimethyl-	0.01208921

Ethyl bromide	0.01206103
2,2'-Dimethylbiphenyl	0.01201399
2H-Pyran-2-one	0.01198142
1,1'-Biphenyl, 4-pentyl-	0.01157403
7-Chloro-1-(4-fluorophenyl)heptan-1-one	0.011546
1,8-Naphthyridine, 2,4,7-trimethyl-	0.01141317
Ethanone, 1-(2,3,4-trihydroxyphenyl)-	0.01108787
Naphthalene, 1,2-dihydro-	0.01061043
1H-Indene, 1,3-dimethyl-	0.01032899
1H-Indene, 1,3-dimethyl-	0.01013141
3-Penten-2-one, 4-methoxy-	0.00992179
3-Penten-2-one	0.00932966
Naphthalene, 1,2-dimethyl-	0.00922648
3-Furaldehyde	0.00898062
Dihexyverine	0.00873315
7-Chloro-1-(4-fluorophenyl)heptan-1-one	0.00835928
p-Dioxin, 2,3-dihydro-5-methyl-	0.00834953
Naphthalene, 1,2-dimethyl-	0.00812805
1-Nonen-3-one, 1-phenyl-	0.00807358
Heptane, 4-methylene-	0.00795025
4,5-Dimethoxy-2-hydroxyacetophenone	0.00792259
4-Methoxyphenylaldehyde trimethylene acetal	0.00791977
Peroxide, dimethyl	0.00791601
1,1'-Biphenyl, 5-hydroxy-3,4'-dimethoxy-	0.00788919
Pentane, 2,2,4-trimethyl-	0.00784925
Ethanone, 1-(2,5-dihydroxyphenyl)-	0.00778198
Encecalin	0.00771069
9H-Fluorene, 9-methylene-	0.00709027
2,5-Dihydroxypropiophenone	0.00701713
Benzaldehyde, 4-ethoxy-	0.00697128
1H-Indene, 1,1-dimethyl-	0.00678745
Thymine	0.00677872
Hymecromone	0.00677184
2-Pentanone, 5-(acetyloxy)-	0.00659169
Anthracene, 9,10-dihydro-9-methyl-10-propyl-	0.00658405
Ethanone, 1-(2-hydroxy-4-methoxyphenyl)-	0.00652883
2,2'-Dimethylbiphenyl	0.00651693
2',6'-Dihydroxy-3'-methylacetophenone	0.00644736
Thiophene, 2,5-bis(1,1-dimethylethyl)-	0.00634127
1,1':2',1''-Terphenyl, 4'-phenyl-	0.00631185
Ethanone, 1-(2,3,4-trihydroxyphenyl)-	0.00610435
Ethanone, diphenyl(phenylimino)-	0.00606198
4-Stilbene carboxaldehyde	0.00603164

6-Hydroxy-4-methylcoumarin	0.00599107
Benzo[b]thiophene, 2-ethyl-	0.00571074
Dehydromevalonic lactone	0.00528745
Dibenz[a,h]anthracene, 5,6-dihydro-	0.00511167
4-Methyl-2,4-bis(p-hydroxyphenyl)pent-1-ene, 2TMS derivative	0.00509758
Naphthalene, 1,4,6-trimethyl-	0.00487906
Benzidine, 3,3'-dimethoxy-	0.00480961
7H-Benzo[c]fluorene	0.00453732
Benz[a]anthracene, 7,12-dihydro-	0.00447511
1H-Indene, 1,1-dimethyl-	0.00429298
1,1'-Biphenyl, 4-pentyl-	0.00420143
Naphthalene, 1,2-dihydro-	0.00419296
2,5-Dihydroxy-4-methoxyacetophenone	0.00419151
Acetone	0.00413008
3-Methylbenzothiophene	0.00407746
7-Chloro-1-(4-fluorophenyl)heptan-1-one	0.00372483
L-Leucine, N-methyl-N-(but-3-yn-1-yloxycarbonyl)-, hexadecyl ester	0.0036819
Methyl 2-hydroxy-4-methylbenzoate	0.00363751
2-(4'-Methoxyphenyl)-2-(3'-methyl-4'methoxyphenyl)propane	0.00363651
1H-Indene, 1,1-dimethyl-	0.00336729
Ethanone, 1-(5-chloro-2-hydroxyphenyl)-	0.00306983
Phosphinothioic amide, N,P,P-triphenyl-	0.00291518
2,4,6,(1H,3H,5H)-Pyrimidinetrione, 5-acetyl-	0.0028971
Ethyl bromide	0.00286728
Pentobarbital	0.00283438
1,4-Dimethyl-6-phenyl-naphthalene	0.00277169
1,4-Dimethyl-2-phenyl-naphthalene	0.00275444
2',4'-Dihydroxypropiophenone	0.00274751
Naphthalene, 2-(phenylmethyl)-	0.00266036
1,1'-Biphenyl, 4-pentyl-	0.00265956
7H-Benzo[c]fluorene	0.00264774
Benzaldehyde, 2,4-dihydroxy-6-methyl-	0.00257878
4',6'-Dihydroxy-2',3'-dimethylacetophenone	0.00246472
2,4'-Dichloro-4-methoxydiphenyl ether	0.00231393
Conglomerone	0.00206763
Succinic anhydride	0.00200103
Ethanone, 1-(3-hydroxyphenyl)-	0.00196775
Furfural	0.00193242
Dimethylphosphinic fluoride	0.00180932
Methyl 3,5-dihydroxybenzoate, 2TMS derivative	0.00165633
9H-Fluorene, 9,9-diphenyl-	0.00164586
2,4,6,(1H,3H,5H)-Pyrimidinetrione, 5-acetyl-	0.00155756

Naphthalene, 1,8-dichloro-	0.00154692
9H-Fluorene, 9,9-diphenyl-	0.00153113
3,5-di-tert-Butyl-4-hydroxyacetophenone	0.0015071
1,4-Naphthalenedione, 5,8-dihydroxy-2,3,7-trimethyl-	0.00144415
Dimethylphosphinic fluoride	0.00144035
1,8-Naphthyridine, 2,4,7-trimethyl-	0.00126621
4H-1-Benzopyran-4-one, 3-(3,4-dimethoxyphenyl)-6,7-dimethoxy-	0.00099739
3,5-di-tert-Butyl-4-hydroxyacetophenone	0.0008715
2-Benzylidene-coumaran-3-one	0.0007709
Total Area (%)	32.9764865
Sample-PNS+PS (30 wt.%) + CuO (5 wt.%)	
Furfural	4.89845287
1,1':3',1''-Terphenyl, 5'-phenyl-	3.04358694
1H-Indene, 1-(phenylmethylene)-	1.93016833
4-Methyl-2,4-bis(p-hydroxyphenyl)pent-1-ene, 2TMS derivative	1.27267754
Bibenzyl	1.21915392
Difluoromethane	1.17286294
2,5-Diphenyl-1,5-hexadiene	1.1255447
D-Norleucine, N-propargyloxycarbonyl-, isohexyl ester	1.06529672
Dibutyl phthalate	0.96005437
Allylescaline	0.83877296
1,5-Diphenyl-1,5-hexadiene	0.737804
di-p-Tolylacetylene	0.73449267
Syringylacetone	0.58850728
m-Terphenyl	0.51480031
1-(4-Methylphenyl)-4-phenylbuta-1,3-diene	0.44303762
Ethylene, 1,1-diphenyl-	0.41126202
Diphenylmethane	0.37371519
Ethyl bromide	0.37122883
Homosyringaldehyde	0.36795449
1,5-Hexadiene, 3,3,4,4-tetrafluoro-	0.36369701
1,1':2',1''-Terphenyl, 4'-phenyl-	0.35477735
Hex-1-ene,2,5-diphenyl-	0.33821475
1,4-Diphenyl-1,3-butadiene	0.30757352
1,3-Butadiene, 1,4-diphenyl-, (E,E)-	0.30665728
Methyl N-(4-methylbenzyl)-N-(vinylsulfonyl)-L-serinate	0.29959989
Benzaldehyde	0.29226274
4-Methoxyphenylaldehyde trimethylene acetal	0.28111372
2,2'-Methylenedithiophene	0.26994734
2-Propanone, 1,3-diphenyl-	0.23989706
Uracil	0.23545649
Acetophenone	0.23448351

Phenanthrene, 2,5-dimethyl-	0.21682159
1H-Indene, 1-(phenylmethylene)-	0.20929016
3-Furaldehyde	0.19127482
1,3-Pentadiene, 1,1-diphenyl-, (Z)-	0.17618503
8-Methyl-5H-pyrido[4,3-b]indole	0.16898098
1,5-Diphenyl-1,5-hexadiene	0.16805991
Ethanone, 1-(2,5-dihydroxyphenyl)-	0.15115755
2,5-Dihydroxypropiophenone	0.14963896
Butylsyringone	0.14934102
p-Terphenyl	0.14317677
1H-Inden-1-one, 2,3-dihydro-	0.12089035
9,10-Anthracenedione, 2-methyl-	0.11965949
1H-Indene, 2-phenyl-	0.11698652
1,4-Diphenyl-1,3-butadiene	0.11671301
Biphenyl	0.11637469
3-Buten-1-one, 1,4-diphenyl-	0.11479596
4H-Benz[de]anthracene, 5,6-dihydro-	0.11001281
Hexa-1,3,5-triyn	0.10870488
Anthracene, 9,10-dihydro-	0.10783052
3-Acetyl-2,5,6-trimethylhydroquinone	0.0988124
2-Propanone, 1-(acetyloxy)-	0.0965889
1,3-Pentadiene, 1,1-diphenyl-, (Z)-	0.09441299
5-Acetyl-2-methyl-3-thiophenecarbaldehyde	0.09265134
2-Methylindene	0.08925055
1-(4-Methylphenyl)-4-phenylbuta-1,3-diene	0.08727774
1-Penten-3-one	0.08426583
Ethanedione, diphenyl-	0.0838578
Ethanone, 1-(4-hydroxy-3,5-dimethoxyphenyl)-	0.08199059
Dodecane, 4,6-dimethyl-	0.07933993
Benzaldehyde, 2-hydroxy-	0.07797605
2H-1-Benzopyran-2-one, 3,4-dihydro-6-hydroxy-	0.07426061
Heneicosane	0.07263927
Phenanthrene, 3,6-dimethyl-	0.07093342
Benzaldehyde, 2,4-dihydroxy-6-methyl-	0.07088209
Methylene chloride	0.07070489
1H-Indene, 2,3-dihydro-5-methyl-	0.0703991
Squalene	0.06958466
2-Butanone, 1-(acetyloxy)-	0.06398116
1-Methylsulfonyl-1,2-diphenylethane	0.06290161
2,3-Pentanedione	0.06196977
1,3,5-Triphenyl-1,5-pentanedione	0.06196323
Butan-2-one, 3-(2-ethynyl)(isopropyl)amino-	0.06005685
.beta.-Sitosterol acetate	0.0580295

9,10-Dimethylantracene	0.05785202
Anthracene, 2-methyl-	0.05736792
Flopropione	0.05660442
Resorcinol, 2-acetyl-	0.0561469
Ethyl bromide	0.05458736
2,5-Diphenyl-2,4-hexadiene	0.05411303
Cinnamaldehyde, (E)-	0.05237031
2-Butanone	0.05225201
Methylparaben	0.04983722
Allyl undecanoate	0.0487462
4,6-Heptadiyn-3-one	0.04837763
Decane, 1-iodo-	0.04798431
Ethene, 1-(anthracen-9-yl)-2-(p-tolyl)-, (E)-	0.04780151
Beta-hydroxyphenethyl benzoate	0.04771114
3',5'-Dihydroxyacetophenone	0.04722996
3-Methylbenzothiophene	0.04400198
Dodecane, 4,6-dimethyl-	0.04392662
Alanine, N-methyl-N-methoxycarbonyl-, undecyl ester	0.04367093
Indan, 1-methyl-	0.04349017
1-Pentanone, 1-(4-methylphenyl)-	0.04345198
Phenanthrene, 2,5-dimethyl-	0.04226336
Bifenthrin	0.04086234
Ethenone, 2,2-diphenyl-	0.04043646
5,7-Dimethylpyrimido-[3,4-a]-indole	0.03842913
7-Chloro-1-(4-fluorophenyl)heptan-1-one	0.03801689
Hexa-1,3,5-triene, 1,3,6-triphenyl-	0.03675261
1H-Indene, octahydro-, cis-	0.03535411
L-Leucine, N-methyl-N-(octyloxycarbonyl)-, dodecyl ester	0.03530353
Bifenthrin	0.03393815
2,5-Hexanedione	0.03349762
Cinnamaldehyde, (E)-	0.03309755
4-Methyl-2,4-bis(p-hydroxyphenyl)pent-1-ene, 2TMS derivative	0.03170299
1-Methyl-2,5-dipropyldecahydroquinoline	0.03159613
9H-Fluorene, 2,3-dimethyl-	0.03109194
8-Benzylquinoline	0.02976298
Acetaldehyde hexyl isoamyl acetal	0.02975923
9-Ethyl-10-methylantracene	0.02936804
Eicosane, 1-iodo-	0.02839322
Decane, 1-iodo-	0.026994
4-Hexen-3-one	0.0268759
2-Hydroxyskatole	0.02656976
3-Buten-2-one, 3-methyl-	0.02650113
1,1':2',1'':2'',1'''-Quaterphenyl	0.02614083

Ethanone, 1-(2-hydroxy-6-methoxyphenyl)-	0.02597314
Proline, 2-methyl-5-oxo-, methyl ester	0.02590719
1,1'-Biphenyl, 4-pentyl-	0.02516704
2-Methylindene	0.02506893
Glycolaldehyde dimer	0.024783
5-Trimethylsilylpent-2-en-4-yne	0.02470056
(9E)-Styrylanthracene	0.02425982
Ethanone, 1-(3-hydroxyphenyl)-	0.02321199
3,4-Dihydroxy-5-methoxybenzaldehyde	0.02306142
Aminomaleimide	0.02284232
Butabarbital	0.02108516
3-Dibutylamino-1-propyne	0.02075943
8-Phenylisoquinoline	0.01948754
1H-Indene, 1,1-dimethyl-	0.01934901
3-Hydroxy-4-methylbenzaldehyde	0.01919962
2,7-Nonadien-5-one, 4,6-dimethyl-	0.01857572
4,6-Heptadiyn-3-one	0.01835615
Decane, 2,5,9-trimethyl-	0.01750307
4-Methoxyphenylaldehyde trimethylene acetal	0.01725222
6-Ethoxy-2,6-dihdropyran-3-one	0.01692842
tert-Butylpentamethyldisiloxane	0.01687357
3-Furaldehyde	0.01646523
.beta.-Alanine, N-(3-ethoxy-3-oxopropyl)-N-(phenylmethyl)-, ethyl ester	0.0164152
1-Methyl-2,5-dipropyldecahydroquinoline	0.01630767
1H-Indene, 1,3-dimethyl-	0.01617728
2-Butyne-1,4-diyl dibenzoate	0.01564025
3-Buten-2-one, 4-phenyl-	0.01483097
Peroxide, dimethyl	0.01476628
1H-Isoindole, 2,3-dihydro-	0.01460178
Bifenthrin	0.01459938
Heptane, 2,4-dimethyl-	0.01457652
2,2'-Dimethylbiphenyl	0.01453411
Butyrolactone	0.0145307
Undecane, 3,8-dimethyl-	0.01447644
N-(2-Cyano-1-methylvinyl)benzamide	0.01440538
5,6-Dihydrochrysene	0.01437712
quino[2,3-b]acridine-7,14-dione, 5,6a-dihydro-	0.0142005
7H-Benzo[c]fluorene	0.01406774
Isopilocarpine	0.01329017
1-Butanone, 1-phenyl-	0.01323856
1H-Indene, 1-(phenylmethylene)-	0.01316438
2-Propanone, 1-hydroxy-	0.01308733

4-Methoxyphenylaldehyde trimethylene acetal	0.01308337
Silane, dimethoxydimethyl-	0.01295454
Ethanone, 1-(2-thienyl)-	0.01272481
1H-Isoindole, 2,3-dihydro-	0.01258464
Pyrene	0.01248535
Vinyl crotonate	0.01239335
l-Leucine, N-ethoxycarbonyl-N-methyl-, pentadecyl ester	0.01206533
1H-Indene, 1,1-dimethyl-	0.01205067
2-Benzylquinoline	0.01193274
1H-Isoindole, 2,3-dihydro-	0.01178438
Piperoxan	0.01159256
11H-Benzo[a]fluorene	0.01155968
Hexane, 3,3-dimethyl-	0.01133486
1-(4-Bromothiophen-2-yl)heptan-1-one	0.01123806
l-Leucine, N-(2-chloroethoxycarbonyl)-N-methyl-, dodecyl ester	0.01091457
Pyrene	0.01061864
2-Butenal, (E)-	0.01059841
Nonane, 2,2,4,4,6,8,8-heptamethyl-	0.01042269
Methyl 2-butynoate	0.01032738
1H-Indene, 2-phenyl-	0.01023451
3',4'-(Methylenedioxy)acetophenone	0.01005961
Dimethyl phosphite	0.00994602
Bis(trimethylsilyl) methylphosphonate	0.00959412
trans-(2-Chlorovinyl)dimethylethoxysilane	0.00943365
2-Pentanone	0.0094256
2-Isopropyl-10-methylphenanthrene	0.0092451
4,5-Dimethoxy-2-hydroxyacetophenone	0.0092339
Anthracene, 9,10-dihydro-9-(1-methylpropyl)-	0.0091314
5-Heptenal, 2,6-dimethyl-	0.00912771
Furfural	0.00903783
2,5-Dihydroxy-4-methoxyacetophenone	0.00878324
3-Nonen-5-one	0.00874786
Pyrolo[3,2-d]pyrimidin-2,4(1H,3H)-dione	0.00852124
9H-Xanthene	0.00836846
4-Hexen-3-one, 5-methyl-	0.00826173
Benzamide, 4-ethyl-N-(2-bromophenyl)-	0.00790234
3,4-Dihydro-2,7-dimethylpyrimido[4,5-d]pyrimidine	0.00779062
9H-Fluorene, 9,9-diphenyl-	0.00770438
2-(E)-Hexen-1-ol, (4S)-4-amino-5-methyl-	0.00755737
2-Benzylidene-coumaran-3-one	0.00729756
Dimethyl sulfone	0.00721631
2,4,6,(1H,3H,5H)-Pyrimidinetrione, 5-acetyl-	0.00709938
Benzaldehyde, 2,4-dihydroxy-6-methyl-	0.00707424

Methyl formate	0.00692215
1H-Indene, 1,1-dimethyl-	0.00680303
Fluridone	0.00676727
Decane, 3,8-dimethyl-	0.00676672
Methanesulfonyl chloride	0.00668403
2,3-Pentanedione	0.00667922
.alpha.-Pyrrolidinononanophenone	0.00631695
2,3-Pentanedione	0.00628244
9H-Fluorene, 9,9-diphenyl-	0.00625224
2-Cyano-2-O-fluorosulfatofluoropropane	0.00620784
Anisole	0.00618681
l-Norleucine, n-propargyloxycarbonyl-, propargyl ester	0.00610213
Resorcinol, 2-acetyl-	0.00601209
11H-Benzo[b]fluorene	0.00588239
1,3-Benzodioxole	0.0058353
1-Methyl-2,5-dipropyldecahydroquinoline	0.00579208
trans-2-Chloro-3-methylthio-but-2-ene	0.00577145
Dihexyverine	0.00555448
p-Chlorophenyl ethylcarbamate	0.00542857
3-Pentanol, 3-methyl-	0.00540493
trans-(2-Chlorovinyl)dimethylethoxysilane	0.00529584
1H-Indene, 1,1-dimethyl-	0.00517241
1H-Indene, 1,1-dimethyl-	0.00515915
Ethanone, 1-(3-hydroxyphenyl)-	0.00497827
Acetone	0.00483313
Phosphinothioic amide, N,P,P-triphenyl-	0.00471134
3-Methylbenzothiophene	0.00456724
1H-Pyrrole-2-carboxaldehyde, 1-methyl-	0.00446819
Naphthacene	0.00439828
4-Methyl-2,4-bis(p-hydroxyphenyl)pent-1-ene, 2TMS derivative	0.00437096
2,4,6,(1H,3H,5H)-Pyrimidinetrione, 5-acetyl-	0.00434971
3-Methylbenzothiophene	0.00430571
2-Propanol, 1-methoxy-	0.00413873
2-(E)-Hexen-1-ol, (4S)-4-amino-5-methyl-	0.00411589
2-Butenal, (Z)-	0.0040308
2,4-Pentanedione, 3-phenyl-	0.00401228
1-Methyl-3-formylindole	0.00400616
7-Phenyl-7,12-dihydropleiadene	0.00375505
l-Norleucine, n-propargyloxycarbonyl-, propargyl ester	0.00374259
2,4,6,(1H,3H,5H)-Pyrimidinetrione, 5-acetyl-	0.00363295
1,8-Naphthyridine, 2,4,7-trimethyl-	0.00353488
1-Methyl-2,5-dipropyldecahydroquinoline	0.00350822
Butane, 1,4-bis(9,10-dihydro-9-methylanthracen-10-yl)-	0.00350235

1,1'-Biphenyl, 4-pentyl-	0.00343748
m-Cresol, TMS derivative	0.0033935
1H-Indene, 2,3-dihydro-1,2-diphenyl-	0.00337018
2,7-Nonadien-5-one, 4,6-dimethyl-	0.0033616
2-Butanone, 3-methyl-	0.00297448
1H-Indene, 2,3-dihydro-1,2-diphenyl-	0.00297118
2,2'-Biquinoline	0.00282325
4H-1-Benzopyran-4-one, 3-(3,4-dimethoxyphenyl)-6,7-dimethoxy-	0.00276082
6-Methoxy-2-(4-methoxyphenethyl)-4H-chromen-4-one	0.00275854
Benz[a]anthracene, 7,12-dihydro-	0.00267118
2,3-Pentanedione	0.00246559
11H-Benzo[b]fluorene	0.00236968
2,5-Dihydroxy-4-methoxyacetophenone	0.00236665
1H-Indene, 1,1-dimethyl-	0.00232484
3,5-Dihydroxybiphenyl	0.00225196
8-Methyl-5H-pyrido[4,3-b]indole	0.00207621
5-(4-Hydroxyphenyl)pyrimidine	0.00206329
Dimethylphosphinic fluoride	0.00195561
ethanone, 1-(5,8-dimethyl-1-naphthalenyl)-	0.0019051
L-Leucine, N-methyl-N-(3-chloropropoxycarbonyl)-, tridecyl ester	0.00167715
Glycine, N-(2,6-difluorobenzoyl)-, methyl ester	0.00142312
17-Methoxy-4-methyl-d-homo-18-norandrosta-4,8,13,15,17-pentaen-3-one	0.00141734
2-(4'-Methoxyphenyl)-2-(3'-methyl-4'methoxyphenyl)propane	0.00126385
2H-1-Benzopyran, 2,2-diphenyl-	0.00112834
9H-Fluorene, 9-phenyl-	0.00108713
Benzaldehyde, 2,4-difluoro-3-hydroxy-	0.00100667
Dibenz[a,h]anthracene, 5,6-dihydro-	0.00088229
1-Methyl-2,5-dipropyldecahydroquinoline	0.00059543
2-Hydroxy-3-methylanthraquinone, O-trimethylsilyl	0.00042053
Furfural	0.00035932
Total Area (%)	33.4052743