



*Essential Validation Services*



**Nature's** FUSIONS  
ESSENTIAL OILS

### Sample:

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Client: | Nature's Fusions  
Sample: | Nature's Shield (Insect Repellent)  
Batch # | NF-NF.NASH-18-A  
CAS Number |  
Type: | Blend

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### Conclusion:

- No adulterants, diluents, or contaminants were detected via this method.
- This oil meets the expected profile for genuine oil of Nature's Shield (Insect Repellent).

X



Validated By:



Essential Validation Services

747 SW 2nd Ave, Gainesville, FL 32601

Phone: 317-361-5044 E-mail: Adam@essentialvalidationservices.com

### Summary of Analyses

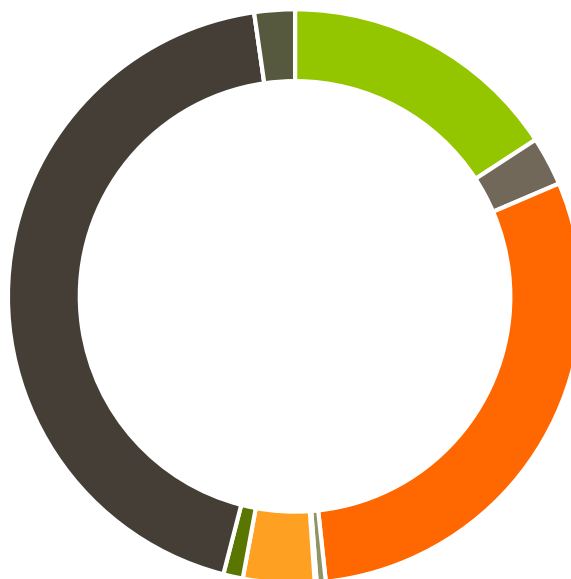
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A fresh sample of Nature's Shield (Insect Repellent) (10 uL in .5to.5 mL Hexane + ETOH) was prepared and analyzed via split injection GC/EI-MS.



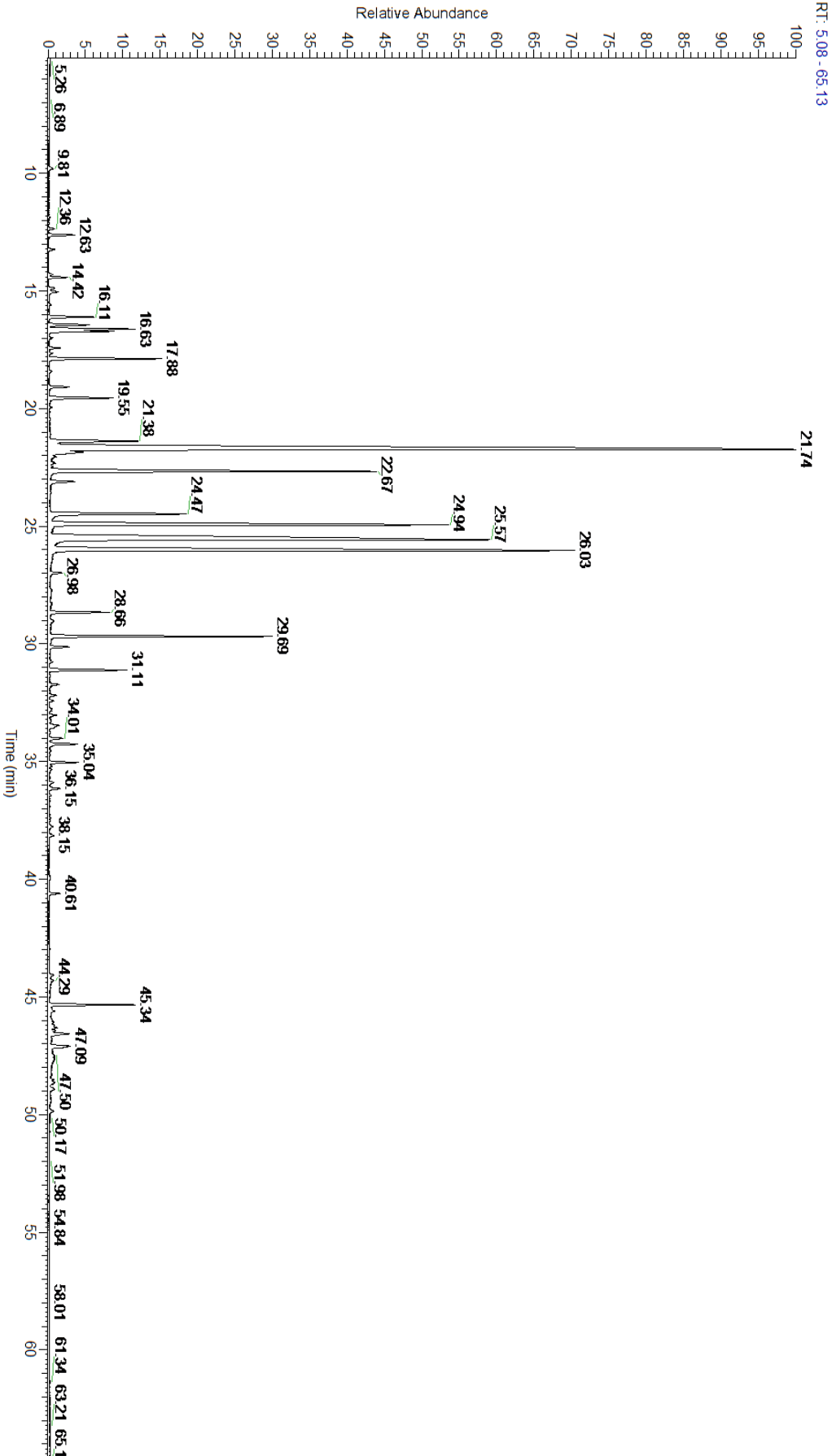
Main Compounds	Percentages
Citronellal	30.52%
Geraniol	16.73%
Geranial	13.18%
Citral	9.31%
Terpinen-4-ol	6.79%
Geranyl acetate	3.64%
Citronellol	2.88%
gamma-Terpinene	1.91%
Isopulegol	1.66%
Limonene	1.53%
beta-Caryophyllene	1.31%
Linalool	1.18%
1,8-Cineole	1.06%

Monoterpenes	Sesquiterpenes	Monoterpenols	Sesquiterpenols	Ketones
15.81%	2.76%	29.72%	0.51%	0.11%
Esters	Ethers	Aldehydes	Phenols	Other
4.01%	1.10%	43.70%	0.00%	2.28%



- Monoterpenes
- Sesquiterpenes
- Monoterpenols
- Sesquiterpenols
- Ketones
- Esters
- Ethers
- Phenols
- Other

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Total Percentage		97.80%			
Peak Number	RT	Area %	Compound Name	RI	Chemical Family
1	9.81	0.08%	cis-Hex-3-en-1-ol	850.00	Aliphatic Alcohol
2	12.35	0.04%	alpha-Thujene	927.80	Monoterpene
3	12.63	0.42%	alpha-Pinene	936.10	Monoterpene
4	13.24	0.09%	Camphene	950.30	Monoterpene
5	14.31	0.05%	Sabinene	973.00	Monoterpene
6	14.42	0.31%	beta-Pinene	974.00	Monoterpene
7	14.89	0.11%	6-Methyl-5-hepten-2-one	982.00	Aliphatic Ketone
8	15.04	0.18%	Myrcene	989.20	Monoterpene
9	16.11	0.75%	delta-3-Carene	1008.00	Monoterpene
10	16.44	0.69%	para-Cymene	1024.30	Monoterpene
11	16.63	1.53%	Limonene	1029.50	Monoterpene
12	16.71	1.06%	1,8-Cineole	1031.80	Monoterpene Ether
13	17.01	0.02%	(Z)-beta-Ocimene	1037.80	Monoterpene
14	17.42	0.18%	(E)-beta-Ocimene	1047.70	Monoterpene
15	17.88	1.91%	gamma-Terpinene	1054.00	Monoterpene
16	19.08	0.33%	Terpinolene	1092.10	Monoterpene
17	19.55	1.18%	Linalool	1099.00	Monoterpenol
18	19.95	0.04%	cis-Rose oxide	1110.00	Monoterpene Ether
19	21.38	1.66%	Isopulegol	1151.25	Monoterpenol
20	21.72	30.52%	Citronellal	1154.50	Monoterpene Aldehyde
21	22.67	6.79%	Terpinen-4-ol	1180.57	Monoterpenol
22	23.10	0.48%	alpha-Terpineol	1191.71	Monoterpenol
23	24.47	2.88%	Citronellol	1229.25	Monoterpenol
24	24.94	9.31%	Citral	1244.12	Monoterpene
25	25.57	16.73%	Geraniol	1255.29	Monoterpenol
26	26.03	13.18%	Geranial	1272.00	Monoterpene Aldehyde
27	26.98	0.20%	Geranyl formate	1304.35	Monoterpene Ester
28	29.69	3.64%	Geranyl acetate	1379.20	Monoterpene Ester
29	30.13	0.31%	beta-Elemene	1389.20	Sesquiterpene
30	31.11	1.31%	beta-Caryophyllene	1427.14	Sesquiterpene
31	31.73	0.17%	beta-Gurjunene	1433.00	Sesquiterpene
32	32.75	0.04%	Dauca-5,8-diene	1472.00	Sesquiterpene
33	33.47	0.21%	gamma-Murolene	1478.86	Sesquiterpene
34	34.01	0.23%	gamma-Cadinene	1515.29	Sesquiterpene
35	34.25	0.49%	delta-Cadinene	1524.14	Sesquiterpene
36	35.04	0.49%	Elemol	1538.00	Sesquiterpenol
37	37.39	0.02%	10-epi-gamma-Eudesmol	1620.00	Sesquiterpenol
38	40.61	0.17%	Geranyl caproate	1726.00	Monoterpene Ester