



## Rose Geranium *Pelargonium roseum*

Batch No. MA-59395  
Madagascar

### Monoterpenes 1.24%

|                           |      |
|---------------------------|------|
| α pinene                  | 0.50 |
| limonene                  | 0.20 |
| myrcene                   | 0.16 |
| para-cymene               | 0.08 |
| (E) β ocimene             | 0.07 |
| (Z) β ocimene             | 0.07 |
| pseudolimonene            | 0.07 |
| β pinene                  | 0.04 |
| bicyclosisquiphellandrene | 0.04 |
| 2-carene                  | 0.01 |

### Monoterpenols 43.48%

|                                  |       |
|----------------------------------|-------|
| citronellol                      | 22.88 |
| geraniol                         | 13.27 |
| linalool                         | 5.16  |
| nerol                            | 0.55  |
| α terpineol                      | 0.43  |
| isopulegol                       | 0.28  |
| (Z) linalool oxide (5)(furanoid) | 0.22  |
| neo-isopulegol                   | 0.21  |
| trans-myrtanol                   | 0.19  |
| neoisomenthol                    | 0.13  |
| terpinen-4-ol                    | 0.05  |
| cis-isogeraniol                  | 0.04  |
| (E,Z) geranyl linalool           | 0.04  |
| myrcenol                         | 0.03  |
| menthol                          | 0.02  |
| (Z) myrtanol                     | 0.02  |

### Aldehydes 1.6%

|             |      |
|-------------|------|
| geranial    | 0.61 |
| neral       | 0.50 |
| citronellal | 0.49 |

### Ethers 1.61%

|                  |      |
|------------------|------|
| cis-Rose oxide   | 1.02 |
| trans-Rose oxide | 0.42 |
| 1,8-cineole      | 0.17 |

### Esters 25.45%

|                          |       |
|--------------------------|-------|
| citronellyl formate      | 11.79 |
| geranyl formate          | 6.17  |
| geranyl tiglate          | 1.35  |
| geranyl propionate       | 1.23  |
| geranyl butyrate         | 1.16  |
| citronellyl butyrate     | 0.86  |
| geranyl isobutyrate      | 0.51  |
| citronellyl acetate      | 0.45  |
| 2-phenylethyl tiglate    | 0.43  |
| geranyl 2-methylbutyrate | 0.34  |
| neryl formate            | 0.33  |
| citronellyl tiglate      | 0.31  |
| geranyl valerate         | 0.19  |
| geranyl caproate         | 0.15  |
| neo-menthyl acetate      | 0.15  |
| geranyl isobutyrate      | 0.12  |
| phenylethyl isobutyrate  | 0.11  |
| (E) citronellyl tiglate  | 0.09  |
| neryl propionate         | 0.06  |
| 2-phenylethyl propionate | 0.05  |
| (E,E) farnesyl acetate   | 0.03  |
| citronellyl pentanoate   | 0.03  |
| geranyl caprylate        | 0.02  |
| neryl acetate            | 0.02  |

### Ketones 8.18%

|                              |      |
|------------------------------|------|
| isomenthone                  | 5.92 |
| menthone                     | 2.14 |
| 6-methyl-5-hepten-2-one      | 0.07 |
| 6-methyl-3,5-heptadien-2-one | 0.05 |

### Other 2.29%

|                   |      |
|-------------------|------|
| 3-methylpentanol  | 0.02 |
| 1-octen-3-ol      | 0.01 |
| (E) hex-3-en-1-ol | 0.01 |
| Unknown           | 2.25 |

### Sesquiterpenes 14.13%

|                    |      |
|--------------------|------|
| 6,9 guaiadiene     | 6.91 |
| β bourbonene       | 1.51 |
| β caryophyllene    | 1.24 |
| α guaiene          | 0.71 |
| germacrene d       | 0.55 |
| β copaene          | 0.48 |
| α copaene          | 0.39 |
| β selinene         | 0.36 |
| α humulene         | 0.3  |
| (E) calamenene     | 0.27 |
| β elemene          | 0.15 |
| allo-aromadendrene | 0.13 |
| γ muurolene        | 0.09 |
| α cubebene         | 0.08 |
| α calacorene       | 0.03 |
| α gurjunene        | 0.03 |
| α ylangene         | 0.03 |
| cis-caryophyllene  | 0.01 |
| α selinene         | 0.10 |
| α muurolene        | 0.18 |
| δ guaiene          | 0.03 |
| δ selinene         | 0.04 |
| (E,E) α farnesene  | 0.02 |

### Sesquiterpenols 1.43

|                     |      |
|---------------------|------|
| longipinanol        | 0.92 |
| 1,10-di-epi-Cubenol | 0.18 |
| (Z) nerolidol       | 0.13 |
| 1-epi-cubenol       | 0.08 |
| (E,E) farnesol      | 0.06 |
| 2E-tridecenol       | 0.05 |
| junenol             | 0.03 |
| globulol            | 0.03 |

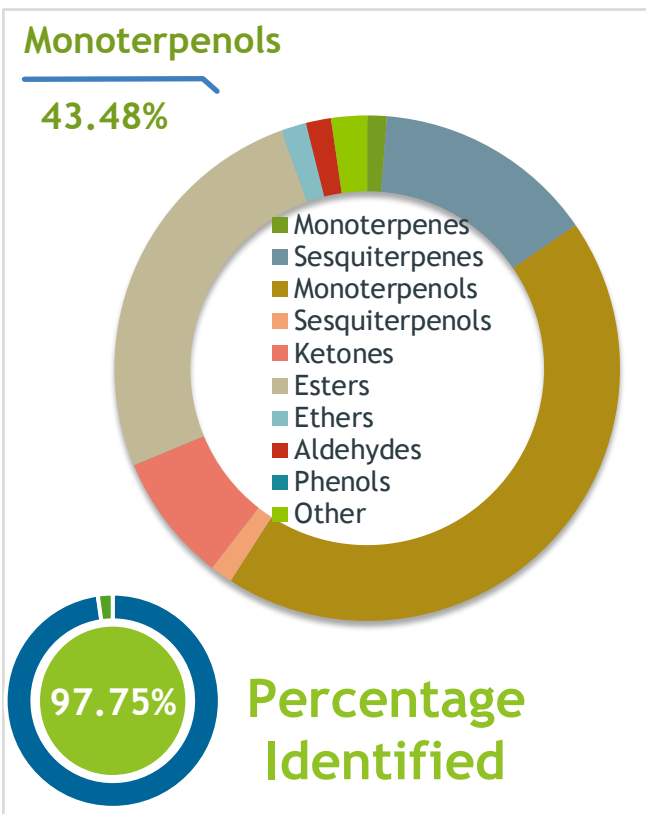
**Client**  **Source** 

Rose Geranium (Pelargonium graveolens)  
MG-59395 - Madagascar

**Sample** Rose Geranium (Pelargonium graveolens)  
Identification #: MG-59395  
Type:..... Essential Oil  
CAS Number:... 8000-46-2  
**Nature's Gift**

**Properties** Country Of Origin | Madagascar  
Specific Gravity | NT  
Refractive Index | NT

**Primary** 22.88% | Citronellol  
13.27% | Geraniol  
11.79% | Citronellyl formate



**Result**   
4/23/2024

**Conclusion** No adulterants, diluents, or contaminants were detected via this method. This oil meets the expected profile for genuine Essential Oil of Rose Geranium (Pelargonium graveolens)  
Internal Number: | EVS-6150

  
**Essential Validation Services**  
747 SW 2nd Ave IMB 12 Suite 306  
Gainesville, FL 32601  
317.361.5044 |  
<https://essentialvalidationservices.com/>  
*Alan Christen*

|                 |        |       |
|-----------------|--------|-------|
| Monoterpenes    | 1.24%  | 1.24% |
| Sesquiterpenes  | 14.13% | 14.13 |
| Monoterpenols   | 43.48% | 43.48 |
| Sesquiterpenols | 1.43%  | 1.43% |
| Ketones         | 8.18   | 8.18% |
| Esters          | 25.64% | 25.64 |
| Ethers          | 1.61%  | 1.61% |
| Aldehydes       | 1.60%  | 1.60% |
| Phenols         | 0.00%  | 0.00% |
| Other           | 2.29%  | 2.29% |

ESSENTIAL VALIDATION SERVICES | 240 GOOSE HOLLOW ROAD BERTHOUD, CO 80513 | 317-361-5044

Client



Source

Rose Geranium (*Pelargonium graveolens*)

MG-59395

| Total Percentage |       | 97.75% |                                   |                      |
|------------------|-------|--------|-----------------------------------|----------------------|
| Number           | RT    | Area % | Compound Name                     | Chemical Family      |
| 1                | 5.43  | 0.02%  | 3-Methylpentanol                  | Aliphatic Alcohol    |
| 2                | 5.70  | 0.01%  | cis-Hex-3-en-1-ol                 | Aliphatic Alcohol    |
| 3                | 8.25  | 0.50%  | alpha-Pinene                      | Monoterpene          |
| 4                | 9.97  | 0.04%  | beta-Pinene                       | Monoterpene          |
| 5                | 10.19 | 0.01%  | 1-Octen-3-ol                      | Aliphatic Alcohol    |
| 6                | 10.36 | 0.07%  | 6-Methyl-5-hepten-2-one           | Aliphatic Ketone     |
| 7                | 10.55 | 0.16%  | Myrcene                           | Monoterpene          |
| 8                | 10.68 | 0.01%  | 2-Carene                          | Monoterpene          |
| 9                | 11.20 | 0.07%  | Pseudolimonene                    | Monoterpene          |
| 10               | 12.00 | 0.08%  | para-Cymene                       | Monoterpene          |
| 11               | 12.21 | 0.20%  | Limonene                          | Monoterpene          |
| 12               | 12.30 | 0.17%  | 1,8-Cineole                       | Monoterpene Ether    |
| 13               | 12.58 | 0.07%  | (Z)-beta-Ocimene                  | Monoterpene          |
| 14               | 13.04 | 0.07%  | (E)-beta-Ocimene                  | Monoterpene          |
| 15               | 14.07 | 0.22%  | cis-Linalool oxide (5) (furanoid) | Monoterpenol         |
| 16               | 15.49 | 5.16%  | Linalool                          | Monoterpenol         |
| 17               | 15.59 | 0.05%  | 6-Methyl-3,5-heptadien-2-one      | Monoterpene Ketone   |
| 18               | 15.90 | 1.02%  | cis-Rose oxide                    | Monoterpene Ether    |
| 19               | 16.62 | 0.42%  | trans-Rose oxide                  | Monoterpene Ether    |
| 20               | 16.82 | 0.03%  | Myrcenol                          | Monoterpenol         |
| 21               | 17.59 | 0.28%  | Isopulegol                        | Monoterpenol         |
| 22               | 17.86 | 0.49%  | Citronellal                       | Monoterpene Aldehyde |
| 23               | 17.93 | 2.14%  | Menthone                          | Monoterpene Ketone   |
| 24               | 18.04 | 0.21%  | neo-Isopulegol                    | Monoterpenol         |
| 25               | 18.34 | 5.92%  | Isomenthone                       | Monoterpene Ketone   |
| 26               | 18.98 | 0.02%  | Menthol                           | Monoterpenol         |
| 27               | 19.09 | 0.05%  | Terpinen-4-ol                     | Monoterpenol         |
| 28               | 19.44 | 0.13%  | Neoisomenthol                     | Monoterpenol         |
| 29               | 19.76 | 0.43%  | alpha-Terpineol                   | Monoterpenol         |
| 30               | 21.17 | 0.55%  | Nerol                             | Monoterpenol         |
| 31               | 21.43 | 22.88% | Citronellol                       | Monoterpenol         |
| 32               | 21.77 | 0.50%  | Neral                             | Monoterpene Aldehyde |
| 33               | 22.14 | 0.02%  | cis-Myrtanol                      | Monoterpenol         |
| 34               | 22.46 | 13.27% | Geraniol                          | Monoterpenol         |
| 35               | 22.63 | 0.15%  | neo-Menthyl acetate               | Monoterpene Ester    |

Client



Source



*Rose Geranium (Pelargonium graveolens)*  
MG-59395

| Number | RT    | Area % | Compound Name                   | Chemical Family      |
|--------|-------|--------|---------------------------------|----------------------|
| 36     | 22.84 | 0.19%  | trans-Myrtanol                  | Monoterpene Ester    |
| 37     | 22.96 | 0.04%  | cis-Isogeraniol                 | Monoterpenol         |
| 38     | 23.11 | 0.61%  | Geranial                        | Monoterpene Aldehyde |
| 39     | 23.41 | 11.79% | Citronellyl formate             | Monoterpene Ester    |
| 40     | 23.51 | 0.33%  | Neryl formate                   | Monoterpene Ester    |
| 41     | 24.49 | 6.17%  | Geranyl formate                 | Monoterpene Ester    |
| 42     | 26.49 | 0.08%  | alpha-Cubebene                  | Sesquiterpene        |
| 43     | 26.63 | 0.05%  | 2-Phenylethyl propionate        | Monoterpene Ester    |
| 44     | 26.72 | 0.45%  | Citronellyl acetate             | Monoterpene Ester    |
| 45     | 27.10 | 0.02%  | Neryl acetate                   | Monoterpene Ester    |
| 46     | 27.39 | 0.03%  | alpha-Ylangene                  | Sesquiterpene        |
| 47     | 27.68 | 0.39%  | alpha-Copaene                   | Sesquiterpene        |
| 48     | 28.00 | 1.51%  | beta-Bourbonene                 | Sesquiterpene        |
| 49     | 28.30 | 0.15%  | beta-Elemene                    | Sesquiterpene        |
| 50     | 28.47 | 0.11%  | Phenylethyl isobutyrate         | Phenolic ester       |
| 51     | 28.86 | 0.01%  | cis-Caryophyllene               | Sesquiterpene        |
| 52     | 28.98 | 0.03%  | alpha-Gurjunene                 | Sesquiterpene        |
| 53     | 29.47 | 1.24%  | beta-Caryophyllene              | Sesquiterpene        |
| 54     | 30.19 | 0.71%  | alpha-Guaiene                   | Sesquiterpene        |
| 55     | 30.44 | 6.91%  | 6,9-Guaiadiene                  | Sesquiterpene        |
| 56     | 30.71 | 0.48%  | beta-Copaene                    | Sesquiterpene        |
| 57     | 30.83 | 0.06%  | Neryl propionate                | Monoterpene Ester    |
| 58     | 30.94 | 0.30%  | alpha-Humulene                  | Sesquiterpene        |
| 59     | 31.12 | 0.13%  | allo-Aromadendrene              | Sesquiterpene        |
| 60     | 31.70 | 1.23%  | Geranyl propionate              | Monoterpene Ester    |
| 61     | 31.79 | 0.09%  | gamma-Murolene                  | Sesquiterpene        |
| 62     | 31.99 | 0.55%  | Germacrene D                    | Sesquiterpene        |
| 63     | 32.29 | 0.36%  | beta-Selinene                   | Sesquiterpene        |
| 64     | 32.42 | 0.04%  | 1-epi-Bicyclosesquiphellandrene | Monoterpene          |
| 65     | 32.60 | 0.10%  | alpha-Selinene                  | Sesquiterpene        |
| 66     | 32.76 | 0.18%  | alpha-Murolene                  | Sesquiterpene        |
| 67     | 32.88 | 0.03%  | delta-Guaiene                   | Sesquiterpene        |
| 68     | 32.96 | 0.04%  | delta-Selinene                  | Sesquiterpene        |
| 69     | 33.10 | 0.02%  | (E,E)-alpha-Farnesene           | Sesquiterpene        |
| 70     | 33.25 | 0.51%  | Geranyl isobutyrate             | Monoterpene Ester    |

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