

P Aloysia citrodora

Common Name(s)

Lemon Verbena

How Used

G

| Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------|--|----------|----------|----------------------|--|
| 67 | 1,8-CINEOLE | Plant 28 | 420 | -0.44377263456589705 | |
| 0 | 1-OCTEN-3-OL | Plant 10 | 70 | -0.2961910811731087 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 0 | 2,5-DIMETHYL-2-VINYL-4-HEXENAL | Plant -- | -- | | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 0 | 2,6-EPOXY-CARYOPHYLLANE | Plant -- | -- | | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 0 | 2-ISOPROPYLIDEN-5-METHYLCYCLOPENTANONE | Plant -- | -- | | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 2 | 3-OCTANOL | Plant 1 | 7 | -0.6384931845336519 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 0 | 3-OCTANONE | Plant 1 | 4 | -0.8347013477036836 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 0 | 6-HYDROXY-LUTEIN | Plant -- | -- | | |

| Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------|------------------------|---------|----------|--------|--|
| 16 | ACETIC-ACID | Plant | -- | -- | Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952. |
| 0 | ALCOHOLS | Plant | 200 | 1400 | -0.6057158476207524 |
| 0 | ALLO-AROMADENDRENE | Plant | 4 | 28 | -0.6103919797150709 Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 3 | ALPHA-CADINOL | Plant | 2 | 14 | -0.7144933419706144 Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 0 | ALPHA-CARYOPHYLLENE | Plant | -- | -- | Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp. |
| 3 | ALPHA-CEDRENE | Plant | -- | -- | Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952. |
| 2 | ALPHA-CITRAL | Plant | -- | -- | Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952. |
| 0 | ALPHA-FARNESENE | Plant | 24 | 168 | 1.4068346104009426 Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 28 | ALPHA-PINENE | Plant | 1 | 7 | -0.4765216242332876 Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 13 | ALPHA-TERPINENE | Plant | -- | -- | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 101 | APIGENIN | Plant | -- | -- | |
| 2 | APIGENIN-7-O-GLUCOSIDE | Plant | -- | -- | |
| 3 | AR-CURCUMENE | Plant | 30 | 315 | 1.9911907027073665 Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference Citation |
|---------------------|--------------------------------------|---------|----------|--------|---|
| 0 | BETA-CARYOPHYLLENE | Plant | -- | -- | Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952. |
| 2 | BETA-CITRAL | Plant | -- | -- | Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952. |
| 0 | BETA-CURCUMENE | Plant | 20 | 140 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 0 | BETA-HEXENOL | Plant | -- | -- | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 13 | BETA-IONONE | Plant | 2 | 14 | 1.3846219390542787 Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 0 | BETA-MAALIENE | Plant | 20 | 140 | 1 Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 13 | BETA-PINENE | Plant | 5 | 35 | -0.3976959112602827 Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 0 | BICYCLOGERMACRENE | Plant | 24 | 168 | 0.06295225013692733 Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 35 | BORNEOL | Plant | -- | -- | Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952. |
| 9 | CAMPHENE | Plant | -- | -- | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 0 | CARYOPHYLLA-1-(12),7-DIEN-9-ALPHA-OL | Plant | -- | -- | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 0 | CARYOPHYLLA-1-(12),7-DIEN-9-BETA-OL | Plant | -- | -- | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |

| Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------|--|-----------|----------|----------------------|--|
| 0 | CARYOPHYLLA-1-(12),8(15)-DIEN-9-ALPHA-OL | Plant -- | -- | | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 31 | CARYOPHYLLENE | Plant 30 | 266 | -0.22395459569098666 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 0 | CARYOPHYLLENE-2,6-BETA-OXIDE | Plant -- | -- | | |
| 6 | CARYOPHYLLENE-EPOXIDE | Plant -- | -- | | |
| 8 | CARYOPHYLLENE-OXIDE | Plant 20 | 140 | -0.15146472508588207 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 3 | CEDROL | Plant 1 | 7 | | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 7 | CHRYSOERIOL | Plant -- | -- | | |
| 0 | CINEOLE | Plant 40 | 280 | -0.6762476017837395 | |
| 3 | CIRSILIOIOL | Plant -- | -- | | |
| 0 | CIRSIMARITRIN | Plant -- | -- | | |
| 0 | CIS-3-HEXENYL-ACETATE | Plant -- | -- | | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 3 | CIS-OCIMENE | Plant 1 | 4 | -0.49169086538218515 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 0 | CIS-ROSE-OXIDE | Plant -- | -- | | |
| 53 | CITRAL | Plant 180 | 1820 | -0.4767698048882568 | |
| 0 | CITRONAL | Plant -- | -- | | |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference Citation |
|---------------------|-------------------------|----------|----------|---------------------|--|
| 20 | CITRONELLAL | Plant -- | -- | | Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp. |
| 15 | CITRONELLOL | Plant 10 | 70 | -0.5780816771674644 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 2 | CITRONELLYL-ACETATE | Plant 2 | 14 | -0.731161661721156 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 1 | COPAENE | Plant 3 | 21 | -0.5116673832359215 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 0 | CUBEBENE | Plant 3 | 21 | | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 0 | CYMOL | Plant -- | -- | | Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp. |
| 0 | D-ALPHA-TERPINEOL | Plant 25 | 175 | -1 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 0 | D-CITRONELLOL | Plant -- | -- | | Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952. |
| 0 | DECANAL | Plant -- | -- | | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 9 | DELTA-CADINENE | Plant 5 | 35 | -0.315721967751598 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 13 | DIOSMETIN | Plant -- | -- | | |
| 0 | DIOSMETIN-7-O-GLUCOSIDE | Plant -- | -- | | |

| Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------|------------------|-----------|----------|----------------------|--|
| 7 | DIPENTENE | Plant 110 | 770 | -0.2825016103358355 | |
| 0 | EO | Plant 700 | 7000 | -0.2081410016592715 | |
| 0 | EIPHOTOCITRAL-A | Plant 15 | 105 | | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 0 | EIPHOTONEROL-A | Plant -- | -- | | |
| 76 | EUGENOL | Plant -- | -- | | Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp. |
| 0 | EUPAFOLIN | Plant -- | -- | | |
| 8 | EUPATORIN | Plant -- | -- | | |
| 17 | FARNESOL | Plant 1 | 7 | -0.5305639832859745 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 6 | FURFURAL | Plant -- | -- | | Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952. |
| 0 | GAMMA-CADINENE | Plant 2 | 14 | -0.45984857009077795 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 0 | GAMMA-HEXENOL | Plant -- | -- | | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 10 | GENIPOSIDIC-ACID | Plant -- | -- | | |
| 13 | GERANIAL | Plant 150 | 1820 | 0.35362075880180355 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 35 | GERANIOL | Plant 5 | 420 | -0.37748772897210603 | |

| Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------|--------------------------|-----------|----------|----------------------|--|
| 5 | GERANYL-ACETATE | Plant 15 | 126 | -0.41568420886904717 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 2 | GERMACRENE-D | Plant 18 | 126 | -0.3153752158273603 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 0 | HEX-4-EN-1-AL | Plant -- | -- | | |
| 0 | HEXANYL-ACETATE | Plant -- | -- | | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 7 | HISPIDULIN | Plant -- | -- | | |
| 1 | IRIDOIDS | Plant -- | -- | | |
| 1 | ISOCARYOPHYLLENE | Plant -- | -- | | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 0 | ISOCARYOPHYLLENE-EPOXIDE | Plant -- | -- | | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 3 | ISOPULEGOL | Plant 1 | 7 | -0.7165345445668047 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 5 | ISOVALERIC-ACID | Plant -- | -- | | Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952. |
| 0 | KUBOSONE | Plant -- | -- | | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 6 | L-CARVONE | Plant -- | -- | | Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952. |
| 2 | L-LIMONENE | Plant 110 | 770 | 0.026075309947884148 | |
| 60 | LIMONENE | Plant 42 | 1050 | 0.1595124364467663 | |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference Citation |
|---------------------|-----------------------------|-----------|----------|----------------------|--|
| 0 | LINALOL | Plant 5 | 35 | -0.42430249830875855 | |
| 53 | LINALOOL | Plant 5 | 35 | -0.6595829361063191 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 15 | LUTEIN | Plant -- | -- | | |
| 0 | LUTEIN-7-O-BETA-D-GLUCOSIDE | Plant -- | -- | | |
| 78 | LUTEOLIN | Plant -- | -- | | Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp. |
| 0 | METHYL-HEPTENONE | Plant 17 | 280 | 2.209568186889144 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 22 | MYRCENE | Plant 1 | 7 | -0.4684120689874457 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 4 | NERAL | Plant 120 | 840 | 0.008086064007136419 | |
| 10 | NEROL | Plant 52 | 364 | -0.20710755808907458 | |
| 0 | NEROL-EPOXIDE | Plant -- | -- | | |
| 0 | NEROL-OXIDE | Plant -- | -- | | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 11 | NEROLIDOL | Plant 13 | 140 | 1.8771192057127104 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 5 | NERYL-ACETATE | Plant 40 | 280 | -0.12657876189073342 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 0 | OCTANOL | Plant -- | -- | | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference Citation |
|---------------------|------------------|----------|----------|---------------------|--|
| 16 | P-CYMENE | Plant 1 | 7 | -0.4184328840402544 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 2 | PECTOLINARIGENIN | Plant -- | -- | | Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp. |
| 0 | PERILLEN | Plant -- | -- | | |
| 0 | PHOTOCITRAL-A | Plant -- | -- | | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 0 | PHOTOCITRAL-B | Plant -- | -- | | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 0 | PHOTONEROL-A | Plant -- | -- | | |
| 0 | PHOTONEROL-B | Plant -- | -- | | |
| 0 | PYRROLE | Plant -- | -- | | |
| 0 | PYRROLIC-ACID | Plant -- | -- | | Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp. |
| 0 | ROSEFURAN | Plant -- | -- | | |
| 5 | SABINENE | Plant -- | -- | | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 0 | SALVIGENIN | Plant -- | -- | | |
| 0 | SPATHULENOL | Plant 25 | 175 | 0.5254266818443734 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference Citation |
|---------------------|-------------------------|----------|----------|----------------------|--|
| 0 | T-CADINOL | Plant 5 | 35 | -0.23187492634055548 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 0 | T-MUUROLOL | Plant -- | -- | | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 35 | TANNIN | Plant -- | -- | | Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989. |
| 23 | TERPINEN-4-OL | Plant 3 | 21 | -0.272339846599895 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 9 | TERPINOLENE | Plant -- | -- | | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 2 | THUJOPSENE | Plant 2 | 14 | | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 0 | TRANS,TRANS-PHOTOCITRAL | Plant -- | -- | | |
| 0 | TRANS-LIMONENE-EPOXIDE | Plant -- | -- | | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 0 | TRANS-OCIMENE | Plant 8 | 175 | -0.37459996816197827 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 0 | TRANS-SABINENE-HYDRATE | Plant 2 | 14 | -0.3718926775847774 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 5 | VERBENONE | Plant -- | -- | | Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952. |