



CITRUS and ALLIED ESSENCES LTD.

4620 Mercedes Drive, Belcamp, MD 21017 (410) 273-9500 phone (410)273-9503 fax

AROMA CHEMICAL PRODUCT LIST

| <u>Item #</u> | <u>Description</u> | <u>Flash Point F</u> | <u>FEMA #</u> |
|---------------|--|----------------------|---------------|
| A12797 | ALDEHYDE C-8 FCC(Octanal) | 125 | 2797 |
| A12362 | ALDEHYDE C-10 FCC (Decanal) | 180 | 2362 |
| A19150 | ALDEHYDE C-16 FCC (so-called)(Ethyl Methyl Phenyl Glycidate) | >200 | 2444 |
| A71296 | ALLYL AMYL GLYCOLATE | >200 | N/A |
| A12479 | ALPHA FENCHONE | 145 | 4519 |
| A13390 | ALPHA FENCHYL ACETATE REDISTILLED | 183 | 3390 |
| A52480 | ALPHA FENCHYL ALCOHOL | 165 | 2480 |
| A12902 | ALPHA PINENE FCC(Refined) (NATURAL) | 84 | 2902 |
| A19089 | AMYL ACETATE FCC (Isoamyl Acetate) | 77 | 2055 |
| A12055 | ISO AMYL ACETATE (NATURAL) | 77 | 2055 |
| A19088 | AMYL BUTYRATE FCC (Isoamyl Butyrate) | 135 | 2060 |
| A12060 | ISO AMYL BUTYRATE (NATURAL) | 135 | 2060 |
| A52086 | ANETHOLE 21/22 FCC | >200 | 2086 |
| A41010 | ANETHOLE FCC (NATURAL) | >200 | 2086 |
| A90371 | ANISYL ACETATE FCC | >200 | 2098 |
| A12099 | ANISYL ALCOHOL FCC | >200 | 2099 |
| A90372 | ANISYL FORMATE EXTRA FCC | >200 | 2101 |
| A19044 | BENZALDEHYDE RECTIFIED FCC | 144 | 2127 |
| A52381 | BENZO DIHYDRO PYRONE (Dihydro Coumarin) | >200 | 2381 |
| A12903 | BETA PINENE FCC (Refined) (NATURAL) | 95 | 2903 |
| A12157 | LAEVO BORNEOL CRYSTALS EXTRA (80-20) | >200 | 2157 |
| A121571 | LAEVO BORNEOL CRYSTALS 96% | >200 | 2157 |
| A52159 | LAEVO BORNYL ACETATE FCC | 189 | 2159 |
| A12190 | BUTYL BUTYRL LACTATE | 200 | 2190 |
| A12221N | BUTYRIC ACID (NATURAL) | 170 | 2221 |
| 92735 | D'CARVONE 95% (NATURAL) | 192 | 2249 |
| A12249 | LAEVO CARVONE FCC | >200 | 2249 |
| A122491 | LAEVO CARVONE 88/90% (NATURAL) | >200 | 2249 |
| A52229 | CAMPHENE PERFUMERY 95/97% | 95 | 2229 |
| A19122 | CARAMEL FURANONE | 200 | 3634 |
| | (3-Hydroxy-4,5-Dimethyl-2 (5H)-Furanone) | | |
| | (3% Solution in Propylene Glycol) | | |
| A12252 | CARYOPHELLENE BETA FCC (NATURAL) | >200 | 2252 |
| A12286 | CINNAMIC ALDEHYDE FCC | >200 | 2286 |
| A12286N | CINNAMIC ALDEHYDE 98% (NATURAL) | >200 | 2286 |
| A12305 | CITRAL DIMETHYL ACETAL 93/95% | >180 | 2305 |
| A13494 | CIS-JASMONE | >200 | 3196 |
| A523991 | CITRAL 95%(NATURAL) | >200 | 2303 |
| A523032 | CITRAL EXTRA FCC (NATURAL) | 195 | 2303 |
| A52305 | CITRAL SYNTHETIC 95/96% | 195 | 2303 |
| A52303B | CITRAL SYNTHETIC FCC | 195 | 2303 |
| A52307 | CITRONELLAL 85/90% FCC (NATURAL) | 165 | 2307 |

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| | | Point F | FEMA # |
| A12307 | CITRONELLAL RESIDUES | >200 | |
| A529698 | CITRONELLOL CLASSIQUE 96/98% | 200 | 2309 |
| A52309 | CITRONELLOL COEUR FCC | >200 | 2309 |
| A523091 | CITRONELLOL EXTRA 93/95% FCC | >200 | 2309 |
| A523092 | CITRONELLOL PURE FCC | >200 | 2309 |
| A52311 | CITRONELLYL ACETATE EXTRA FCC | >200 | 2311 |
| A52312 | CITRONELLYL BUTYRATE EXTRA FCC | >200 | 2312 |
| A52314 | CITRONELLYL FORMATE EXTRA FCC | 195 | 2314 |
| A62314 | CITRONELLYL FORMATE PURE | 195 | 2314 |
| A12313 | CITRONELLYL ISOBUTYRATE EXTRA FCC | >200 | 2313 |
| A12316 | CITRONELLYL PROPIONATE EXTRA | >200 | 2316 |
| A19141 | COUMARIN CRYSTALS | >200 | N/A |
| A12391 | DIMETHYL OCTANOL FCC (Tetra Hydrogeraniol) | 190 | 2391 |
| A11012 | DIMETHYL OCTANYL ACETATE EXTRA (Tetra Hydrogeranyl Acetate) | 195 | N/A |
| A19002 | DIHYDRO JASMONE | >200 | |
| A2411 | ESTRAGOLE EXTRA FCC (Methyl Chavicol) (NATURAL) | 176 | 2411 |
| A19085 | ETHYL ACETATE FCC | 24 | 2414 |
| A12414 | ETHYL ACETATE (NATURAL) | 27 | 2414 |
| A19035 | ETHYL ACETOACETATE REDISTILLED FCC | 184 | 2415 |
| A19086 | ETHYL BUTYRATE FCC | 78 | 2427 |
| A12427N | ETHYL BUTYRATE (NATURAL) FCC | 78 | 2427 |
| A12439 | ETHYL CAPROATE FCC | 120 | 2439 |
| A12463 | ETHYL ISOVALERATE (NATURAL) | 90 | 2463 |
| A19079 | ETHYL PROPIONATE FCC | 54 | 2456 |
| A13487 | ETHYL MALTOL FCC | >200 | 3487 |
| A12464 | ETHYL VANILLIN FCC | >200 | 2464 |
| A12465 | EUCALYPTOL FCC (NATURAL) | 115 | 2465 |
| A12467 | EUGENOL EXTRA USP FCC | >200 | 2467 |
| A124671 | EUGENOL 99/100% FCC (NATURAL) | >200 | 2467 |
| A12469 | EUGENYL ACETATE FCC | >200 | 2469 |
| A5520 | GERANIOL #702 (ROSE BASE) | >200 | N/A |
| A525071 | GERANIOL EXTRA 92/94% FCC | >200 | 2507 |
| A52507 | GERANIOL SUPER 96/98% FCC | >200 | 2507 |
| A525070 | GERANIOL (Fine Perfumery) | >200 | 2507 |
| A529293 | GERANIOL CLASSIQUE 92/93% | 200 | 2507 |
| A525072 | GERANIOL 85 FCC | >200 | 2507 |
| A525073 | GERANIOL 95 FCC | >200 | 2507 |
| A525074 | GERANIOL 98 FCC | >200 | 2507 |
| A525075 | GERANIOL COEUR FCC | >200 | 2507 |
| A52831 | GERANIOL ex PALMA ROSA (NATURAL) | >200 | 2507 |
| A525091 | GERANYL ACETATE EXTRA FCC | >200 | 2509 |
| A525092 | GERANYL ACETATE SUPER FCC | >200 | 2509 |
| A59036 | GERANYL ACETATE 85 | >200 | 2509 |
| A59037 | GERANYL BUTYRATE 85 | >200 | 2512 |
| A5914 | GERANYL ACETATE 95/97%(From Geraniol ex Palma Rosa)(NATURAL) | >200 | 2509 |
| A52512 | GERANYL BUTYRATE EXTRA FCC | >200 | 2512 |
| A52514 | GERANYL FORMATE EXTRA FCC | 185 | 2514 |
| A525148 | GERANYL FORMATE 98 | 185 | 2514 |
| A12513 | GERANYL ISOBUTYRATE EXTRA | >200 | 2513 |
| A5251412 | GERANYL PROPIONATE EXTRA | >200 | 2517 |
| A52586 | GERANYL PROPIONATE PURE | >200 | 2517 |
| A12911 | HELIOTROPINE RECRYSTALLIZED EXTRA FCC | >200 | 2911 |
| A12175 | ISOBUTYL ACETATE (NATURAL) | 64 | 2175 |
| A13460 | ISOMENTHONE EXTRA | 174 | 3460 |

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| | | Point F | FEMA # |
| A12962 | ISOPULEGOL EXTRA FCC | 175 | 2962 |
| A12965 | ISOPULEGYL ACETATE | 186 | 2965 |
| | LACTONES | | |
| A12361 | DELTA DECALACTONE FCC | >200 | 2361 |
| A12361N | DELTA DECALACTONE(NATURAL) | >200 | 2361 |
| A12401 | DELTA DODECALACTONE FCC | >200 | 2401 |
| A12401N | DELTA DODECALACTONE(NATURAL) | >200 | 2401 |
| A13294 | DELTA UNDECALACTONE FCC | >200 | 3294 |
| A13356 | DELTA NONALACTONE FCC | >200 | 3356 |
| A13214 | DELTA OCTALACTONE FCC | >200 | 3214 |
| A13590 | DELTA TETRADECALACTONE FCC | >200 | 3590 |
| A12360 | GAMMA DECALACTONE FCC | >200 | 2360 |
| A52360 | GAMMA DECALACTONE (NATURAL) | >200 | 2360 |
| A12400 | GAMMA DODECALACTONE FCC | >200 | 2400 |
| A12539 | GAMMA HEPTALACTONE FCC | >200 | 2539 |
| A12556 | GAMMA HEXALACTONE FCC (Caprolactone) | >200 | 2556 |
| A12781 | GAMMA NONALACTONE FCC | >200 | 2781 |
| | (So-Called Aldehyde C-18) | | |
| A12796 | GAMMA OCTALACTONE FCC | >200 | 2796 |
| A13091 | GAMMA UNDECALACTONE FCC | >200 | 3091 |
| | (So-Called Aldehyde C-14) | | |
| A12283 | GAMMA VALEROLACTONE FCC | >200 | 3103 |
| A13747 | MASSOIA LACTONE 95% (NATURAL) | >200 | 3744 |
| A526350 | LAEVO LINALOOL (EX-Basil)(NATURAL) | 160 | 2635 |
| A52635 | LAEVO LINALOOL (Ex-Ho Wood)(NATURAL) | 160 | 2635 |
| A126351 | LINALOOL PURE SYNTHETIC FCC | 173 | 2635 |
| A12636 | LINALYL ACETATE PURE SYNTHETIC FCC | 184 | 2636 |
| A52637 | LINALYL ACETATE 90/92% (NATURAL) | 184 | 2636 |
| A12665 | LAEVO MENTHOL CRYSTALS USP SELECT FCC (NATURAL) | 190 | 2665 |
| A519039 | LAEVO MENTHONE EXTRA FCC (-20 Rotation)(NATURAL) | 195 | 2667 |
| A52667 | LAEVO MENTHONE FCC (NATURAL) | 195 | 2667 |
| A52668 | LAEVO MENTHYL ACETATE | 198 | 2668 |
| A52668N | LAEVO MENTHYL ACETATE (NATURAL) | 198 | 2668 |
| A58891 | LAEVO MENTHYL LACTATE | 200 | 3748 |
| A58899 | LAEVO MENTHYL LACTATE (NATURAL) | 200 | 3748 |
| A59006 | LONGIFOLENE REDISTILLED | >200 | N/A |
| A12656 | MALTOL FCC | >200 | 2656 |
| A12656N | MALTOL (NATURAL) | >200 | 2656 |
| A59042N | MENTHOFURAN NATURAL 50% | 196 | 3235 |
| A52682 | METHYL ANTHRANILATE EXTRA FCC | >200 | 2682 |
| A52682N | METHYL ANTHRANILATE (NATURAL) | >200 | 2682 |
| A19134 | METHYL HEPTENONE PURE | 135 | 2707 |
| A12544 | METHYL N-AMYL KETONE FCC (2-Heptanone) | 115 | 2544 |
| A12698 | METHYL CINNAMATE FCC (NATURAL) | >200 | 2698 |
| A12700 | METHYL CYCLOPENTENOLONE FCC | N/A | 2700 |
| A12475 | METHYL EUGENOL FCC | >200 | 2475 |
| A2143N | METHYL SALICYLATE 98%(NATURAL) | >200 | 2745 |
| A12769 | NARINGEN RECRYSTALLIZED (NATURAL) | N/A | 2769 |
| A21447 | NEOHESPERDIN DC (Dihydrochalcone) | >200 | 3811 |
| A59007 | NERAL STANDARD 88%(NATURAL) | 195 | 2303 |
| A59007R | NERAL REFINED 94/95%(NATURAL) | >200 | 2303 |
| A12768 | NEROLIN BROMELIA CRYSTALS | N/A | 2768 |
| A52770 | NEROL 98% FCC | >200 | 2770 |
| A527701 | NEROL SPECIAL FCC | >200 | 2770 |

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|---------------|--|----------------------|---------------|
| A52773 | NERYL ACETATE 98 FCC | >200 | 2773 |
| A22776 | NERYL FORMATE 95 | >200 | 2776 |
| A59098 | NOOTKETONE 65/70% | >200 | 3166 |
| A131661 | NOOTKETONE 98% | >200 | 3166 |
| A53166 | NOOTKETONE 50% (EX-GRAPEFRUIT OIL)(NATURAL) | >200 | 3166 |
| A13165N | NOOTKETONE 65/70% (Ex- Grapefruit Oil) (NATURAL) | >200 | 3166 |
| A13581 | OCTANOL -3 | | 3581 |
| A13582 | OCTANYL-3-ACETATE | | 3582 |
| A13583N | OCTANYL-3-ACETATE NATURAL | | 3582 |
| A13068 | PARA TOLYL ALDEHYDE EXTRA | 156 | 3068 |
| A53561 | PERILLA ACETATE (Dihydro CuminyI Acetate) | 200 | 3561 |
| A12664 | PERILLA ALCOHOL (Dihydro CuminyI Alcohol) | 200 | 2664 |
| A13557 | LAEVO PERILLA ALDEHYDE(Dihydro CuminyI Aldehyde) | 200 | 3557 |
| A12858 | PHENYL ETHYL ALCOHOL EXTRA | >200 | 2858 |
| A111643 | PHENYL ETHYL-2 METHYLBUTYRATE(Rose Bud Ester) | 200 | 3632 |
| A12864 | PHENYL ETHYL FORMATE | >200 | 2864 |
| A12862 | PHENYL ETHYL ISOBUTYRATE | >200 | 2862 |
| A13467 | PRENOL (3-METHYL- 2-BUTEN-1-OL) | 115 | 3647 |
| A21168 | PRENYL ACETATE (3-METHYL-2-BUTENYL ACETATE) | 122 | N/A |
| A12922 | PROPENYL GUAETHOL (Vanitrope) | 200 | 2922 |
| A12952 | 3-PROPYLIDENE PHTHALIDE | 200 | 2952 |
| A12588 | RASPBERRY KETONE RECRYSTALLIZED | >200 | 2588 |
| | (Para Hydroxy Phenyl Butanone) | | |
| 15670 | RHODINOL CA#100 | >200 | 2980 |
| 15687 | RHODINOL CLASSIQUE | 200 | 2980 |
| A53189 | SINENSAL 18/20% EX ORANGE (NATURAL) | >200 | 2825 |
| | | | |
| A53174 | STRAWBERRY | 200 | 3174 |
| | (4-HYDROXY-2,5-DIMETHYL-3(2H)-FURANONE) | | |
| | (20% SOLUTION IN PROPYLENE GLYCOL) | | |
| A13174 | STRAWBERRY FURANONE (NATURAL) | 200 | 3174 |
| | (15% SOLUTION IN PROPYLENE GLYCOL) | | |
| A73174 | STRAWBERRY FURANONE (NATURAL) | 70 | 3174 |
| | (15% SOLUTION IN ETHANOL) | | |
| A522481 | TERPINENOL-4 95/96% FCC (NATURAL) | >200 | 2248 |
| 11081 | TERPINENOL FRACTIONS (NATURAL)(EX LIME OIL) | 173 | N/A |
| A13045EU | ALPHA TERPINEOL EU (NATURAL) | 191 | 3045 |
| A13045 | TERPINEOL SUPER FCC | 191 | 3045 |
| A12731N | THYMOL CRYSTALS (NATURAL) | >200 | 3066 |
| A53443 | VALENCENE 80/85% (NATURAL) | 175 | 3443 |
| A13107 | VANILLIN FCC | N/A | 3107 |
| | RARE CHEMICALS: | | |
| A12563 | CIS-3-HEXENOL FCC | 135 | 2563 |
| A13564 | CIS-3-HEXENOL 98% (NATURAL) | 125 | 2563 |
| A19016 | CIS-3-HEXENYL (ETHYL) ACETAL | 160 | 3775 |
| A13176 | CIS-3-HEXENYL ACETATE FCC | 128 | 3171 |
| A13176N | CIS-3-HEXENYL ACETATE 98%(NATURAL) | 128 | 3171 |
| A13402 | CIS-3-HEXENYL BUTYRATE | 170 | 3402 |
| A13353 | CIS-3-HEXENYL FORMATE | 110 | 3353 |
| A13929 | CIS-3-HEXENYL ISOBUTYRATE | 160 | 3929 |
| A111641 | CIS-3-HEXENYL ISOVALERATE | 185 | 3498 |
| A111648 | CIS-3-HEXENYL-2-METHYLBUTYRATE FCC | 190 | 3497 |
| A111648N | CIS-3-HEXENYL 2 METHYLBUTYRATE(NATURAL) | 190 | 3497 |
| A19020 | CIS-3-HEXENYL BENZOATE | >200 | 3688 |

| Item # | Description | Flash | |
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| | | Point F | FEMA # |
| A19021 | CIS-3-HEXENYL SALICYLATE | >200 | N/A |
| A13465 | CIS-6-NONENOL | >200 | 3465 |
| A12780 | TRANS-2, CIS-6 NONADIENOL | 200 | 2780 |
| A19022 | TRANS-2, CIS-6 NONADIENYL ACETATE | 200 | N/A |
| A12805 | 1-OCTEN-3 OL FCC(AMYL VINYL CARBINOL) | 145 | 2805 |
| A13582 | 1-OCTEN-3-YL ACETATE FCC | 190 | 3582 |
| A11164 | 1-PENTEN-3-OL | 77 | 3584 |
| A12562 | TRANS-2-HEXENOL FCC | 133 | 2562 |
| A12564 | TRANS-2-HEXENYL ACETATE FCC | 130 | 2564 |
| A19015 | TRANS-2-HEXENYL BUTYRATE | 162 | 3926 |
| A18133 | TRANS -2-HEXENYL SALICYLATE | 200 | N/A |
| | ALKENALS | | |
| A12366 | TRANS-2-DECENAL FCC | 190 | 2366 |
| A12560 | TRANS-2-HEXENAL FCC | 109 | 2560 |
| A53218 | TRANS-2-PENTENAL | 82 | 3218 |
| A13082 | TRANS-2-TRIDECENAL | >200 | 3082 |
| | ALKADIENALS | | |
| A13135 | TRANS-2, TRANS-4 DECADIENAL 10% | >200 | 3135 |
| A53164 | TRANS-2,TRANS-4 HEPTADIENAL 10% | 150 | 3164 |
| C:A13377 | TRANS-2, CIS-6 NONADIENAL | 181 | 3377 |
| | ESTERS | | |
| A13148 | ETHYL TRANS-2, CIS-4 DECADIENOATE | >200 | 3148 |
| A19135 | ETHYL-3-HYDROXY BUTYRATE | 134 | 3428 |
| A13545 | ETHYL-3-HYDROXY HEXANOATE | 195 | 3545 |
| A13343 | ETHYL-3- METHYLTHIOPROPIONATE FCC | 147 | 3343 |
| A12720 | METHYL-3-METHYLTHIOPROPIONATE | 162 | 2720 |
| | 2-METHYLBUTYRIC ACID & RELATED ESTERS | | |
| A12695 | 2-METHYLBUTYRIC ACID PURE | 176 | 2695 |
| A12795 | 2-METHYLBUTYIC ACID(NATURAL) | 176 | 2695 |
| A53102 | 3-METHYLBUTYRIC ACID (ISOVALERIC ACID) (NATURAL) | 156 | 3102 |
| | | | |
| A13393 | BUTYL-2-METHYLBUTYRATE PURE | 131 | 3393 |
| A12443 | ETHYL-2-METHYLBUTYRATE PURE FCC | 73 | 2443 |
| A52443 | ETHYL-2-METHYLBUTYRATE (NATURAL) | 75 | 2443 |
| A19025 | HEXYL-2-METHYLBUTYRATE PURE | 185 | 3499 |
| A12719 | METHYL-2-METHYLBUTYRATE PURE | 57 | 2719 |
| | MISC. SATURATED & UNSATURATED ACIDS | | |
| A13169 | TRANS-2-HEXENOIC ACID | >200 | 3169 |
| A13437 | 3-METHYL PENTANONIC ACID | 185 | 3437 |
| | PYRAZINES &PENTNOES | | |
| A13126 | 2-ACETYL PYRAZINE FCC | 110 | 3126 |
| A13155 | 2-ETHYL,3-METHYL PYRAZINE FCC | 138 | 3155 |
| A13132 | 2-ISOBUTYL 3-METHOXY PYRAZINE | 176 | 3132 |
| A13183 | METHYL METHOXY PYRAZINE(MIXED ISOMERS) | 95 | 3138 |
| A13244 | 2,3,5 TRIMETHYL PYRAZINE FCC | 130 | 3244 |
| A13237 | 2,3,5,6 TETRAMETHYL PYRAZINE FCC | >200 | 3237 |

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| | THIAZOLES | | |
| A13205 | 4-METHYL-5-ACETOXY ETHYL THIAZOLE (SULFURYL ACETATE) | 175 | 3205 |
| A13204 | 4-METHYL-5-HYDROXY ETHYL THIAZOLE (SULFUROL) | 185 | 3204 |
| A13313 | 4-METHYL-5-VINYL THIAZOLE (VINYL SULFUROL) | 200 | 3313 |

E-Cigarettes Warnings and Disclaimer

The ingredients provided by Citrus and Allied have not been tested, nor have they been deemed safe, for inhalation or use in electronic smoking devices, electronic nicotine delivery systems, electronic cigarettes or other similar devices (collectively "E-Cigarettes"). In supplying ingredients, Citrus and Allied instructs, and by receiving such ingredients recipient confirms, that the ingredients will not be used in connection with the manufacture and distribution of E-Cigarettes or any component thereof.