

List of FEMA Materials in Number Order

| FEMA | Material Name |
|------|--|
| 2001 | Gum arabic |
| 2002 | Acetal |
| 2003 | Acetaldehyde |
| 2004 | Acetaldehyde phenylethyl propyl acetal |
| 2005 | Acetanisol |
| 2006 | Acetic acid |
| 2007 | Triacetin |
| 2008 | Acetoin |
| 2009 | Acetophenone |
| 2010 | Aconitic acid |
| 2011 | Adipic acid |
| 2012 | Agar (<i>Gelidium</i> spp.) |
| 2013 | Alfalfa extract (<i>Medicago sativa</i> L.) |
| 2014 | Algin (<i>Laminaria</i> spp. and other kelps) |
| 2015 | Alginates, sodium, calcium and ammonium |
| 2017 | Allspice (<i>Pimenta officinalis</i> Lind L.) |
| 2018 | Allspice oil (<i>Pimenta officinalis</i> Lind L.) |
| 2019 | Allspice oleoresin/extract (<i>Pimenta officinalis</i> Lind L.) |
| 2020 | Allyl anthranilate |
| 2021 | Allyl butyrate |
| 2022 | Allyl cinnamate |
| 2023 | Allyl cyclohexaneacetate |
| 2024 | Allyl cyclohexanebutyrate |
| 2025 | Allyl cyclohexanehexanoate |
| 2026 | Allyl cyclohexylpropionate |
| 2027 | Allyl cyclohexanevalerate |
| 2028 | Allyl disulfide nature identical |
| 2029 | Allyl 2-ethylbutyrate |
| 2030 | Allyl 2-furoate |
| 2031 | Allyl heptanoate |
| 2032 | Allyl hexanoate |
| 2033 | Allyl alpha-ionone |
| 2034 | Allyl isothiocyanate |
| 2035 | Allyl mercaptan |
| 2036 | Allyl nonanoate |
| 2037 | Allyl octanoate |
| 2038 | Allyl phenoxyacetate |
| 2039 | Allyl phenylacetate |
| 2040 | Allyl propionate |
| 2041 | Allyl sorbate |
| 2042 | Allyl sulfide |
| 2043 | Allyl tiglate |
| 2044 | Allyl 10-undecenoate |
| 2045 | Allyl isovalerate |
| 2046 | Almond oil, bitter (ffpa) (<i>Prunus amygdalus</i>) |
| 2047 | Aloe extract (<i>Aloe</i> spp.) |
| 2048 | Althea root (<i>Althea officinalis</i> L.) |
| 2049 | Ambergris tincture |
| 2050 | Ambrette seed absolute (<i>Hibiscus abelmoschus</i> L.) |
| 2051 | Ambrette seed oil (<i>Hibiscus abelmoschus</i> L.) |
| 2052 | Ambrette tincture (<i>Hibiscus abelmoschus</i> L.) |
| 2053 | Ammonium sulfide |
| 2054 | Ammonium isovalerate |
| 2055 | Isoamyl acetate |
| 2056 | Amyl alcohol |
| 2057 | Isoamyl alcohol |
| 2058 | Isoamyl benzoate |
| 2059 | Amyl butyrate |
| 2060 | Isoamyl butyrate |
| 2061 | alpha-Amylcinnamaldehyde |
| 2062 | alpha-Amylcinnamaldehyde dimethyl acetal |
| 2063 | Isoamyl cinnamate |
| 2064 | alpha-Amylcinnamyl acetate |
| 2065 | alpha-Amylcinnamyl alcohol |
| 2066 | alpha-Amylcinnamyl formate |
| 2067 | alpha-Amylcinnamyl isovalerate |
| 2068 | Amyl formate |
| 2069 | Isoamyl formate |

| FEMA | Material Name |
|------|--|
| 2070 | Isoamyl 4-(2-furan)butyrate |
| 2071 | Isoamyl 3(2-furan)propionate |
| 2072 | Amyl 2-furoate |
| 2073 | Amyl heptanoate |
| 2074 | Amyl hexanoate |
| 2075 | Isoamyl hexanoate |
| 2076 | 2-Amyl-5-keto-1,4 dioxane 2-Amyl-5 or 6-keto-1,4-dioxane 2-Amyl-6-keto-1,4-dioxane |
| 2077 | Isoamyl laurate |
| 2078 | Isoamyl nonanoate |
| 2079 | Amyl octanoate |
| 2080 | Isoamyl octanoate |
| 2081 | Isoamyl phenylacetate |
| 2082 | Isoamyl propionate |
| 2083 | Isoamyl pyruvate |
| 2084 | Isoamyl salicylate |
| 2085 | Isoamyl isovalerate |
| 2086 | trans-Anethole |
| 2087 | Angelica root extract (<i>Angelica archangelica</i> L.) |
| 2088 | Angelica root oil (<i>Angelica archangelica</i> L.) |
| 2089 | Angelica seed extract (<i>Angelica archangelica</i> L.) |
| 2090 | Angelica seed oil (<i>Angelica archangelica</i> L.) |
| 2091 | Angelica stem oil (<i>Angelica archangelica</i> L.) |
| 2092 | Angostura extract (<i>Galipea officinalis</i> Hancock) |
| 2093 | Anise (<i>Pimpinella anisum</i> L.) |
| 2094 | Anise oil (<i>Pimpinella anisum</i> L.) |
| 2095 | Anise star (<i>Illicium verum</i> Hook, F.) |
| 2096 | Anise star oil (<i>Illicium verum</i> Hook, F.) |
| 2097 | Anisole |
| 2098 | Anisyl acetate |
| 2099 | Anisyl alcohol |
| 2100 | Anisyl butyrate |
| 2101 | Anisyl formate |
| 2102 | Anisyl propionate |
| 2103 | Annatto extract (<i>Bixa orellana</i> L.) |
| 2104 | Annatto seed (<i>Bixa orellana</i> L.) |
| 2105 | Apricot kernel oil (<i>Prunus armeniaca</i> L.) |
| 2106 | Asafoetida fluid extract (<i>Ferula assafoetida</i> L.) |
| 2107 | Asafoetida gum (<i>Ferula assafoetida</i> L.) |
| 2108 | Asafoetida oil (<i>Ferula assafoetida</i> L.) |
| 2109 | Ascorbic acid |
| 2110 | Ash bark, prickly, extract (<i>Xanthoxylum</i> spp.) |
| 2111 | Balm (<i>Melissa officinalis</i> L.) |
| 2112 | Balm leaves extract (<i>Melissa officinalis</i> L.) |
| 2113 | Balm leaves oil (<i>Melissa officinalis</i> L.) |
| 2114 | Balsam fir oil (<i>Abies balsamea</i> (L.) Mill.) |
| 2115 | Balsam fir oleoresin (<i>Abies balsamea</i> (L.) Mill.) |
| 2116 | Balsam Peru (<i>Myroxylon pereirae</i> Klotzsch) |
| 2117 | Balsam oil, Peru (<i>Myroxylon pereirae</i> Klotzsch) |
| 2118 | Basil (<i>Ocimum basilicum</i> L.) |
| 2119 | Basil oil (<i>Ocimum basilicum</i> L.) |
| 2120 | Basil extract (<i>Ocimum basilicum</i> L.) |
| 2121 | Bay leaves, West Indian, extract (<i>Pimenta racemosa</i> Mill.) |
| 2122 | Bay leaves, West Indian, oil (<i>Pimenta racemosa</i> Mill.) |
| 2123 | Bay leaves, West Indian, oleoresin (<i>Pimenta racemosa</i> Mill.) |
| 2124 | Bay, sweet (<i>Laurus nobilis</i> L.) |
| 2125 | Bay, sweet, oil (<i>Laurus nobilis</i> L.) |
| 2126 | Beeswax absolute (<i>Apis mellifera</i> L.) |
| 2127 | Benzaldehyde |
| 2128 | Benzaldehyde dimethyl acetal |
| 2129 | Benzaldehyde glyceryl acetal |
| 2130 | Benzaldehyde propylene glycol acetal |
| 2131 | Benzoic acid |
| 2132 | Benzoin |
| 2133 | Benzoin resinoid (<i>Styrax tonkinensis</i> Pierre) |
| 2134 | Benzophenone |
| 2135 | Benzyl acetate |

| FEMA | Material Name |
|------|---|
| 2136 | Benzyl acetoacetate |
| 2137 | Benzyl alcohol |
| 2138 | Benzyl benzoate |
| 2139 | Butyl benzyl ether |
| 2140 | Benzyl butyrate |
| 2141 | Benzyl isobutyrate |
| 2142 | Benzyl cinnamate |
| 2143 | Benzyl methyltiglate |
| 2144 | Benzyl ethyl ether |
| 2145 | Benzyl formate |
| 2146 | Benzyl dipropyl ketone |
| 2147 | Benzyl mercaptan |
| 2148 | Benzyl methoxyethyl acetal |
| 2149 | Benzyl phenylacetate |
| 2150 | Benzyl propionate |
| 2151 | Benzyl salicylate |
| 2152 | Benzyl isovalerate |
| 2153 | Bergamot oil (<i>Citrus aurantium</i> L. subsp. <i>bergamia</i>) |
| 2154 | Birch sweet oil (<i>Betula lenta</i> L.) |
| 2155 | Blackberry bark extract (<i>Rubus</i> , spp. of section <i>Eubatus</i>) |
| 2156 | Bois de rose oil (<i>Aniba rosaeodora</i> Ducke) |
| 2157 | Borneol |
| 2158 | Isoborneol |
| 2159 | Bornyl acetate |
| 2160 | Isobornyl acetate |
| 2161 | Bornyl formate |
| 2162 | Isobornyl formate |
| 2163 | Isobornyl propionate |
| 2164 | Bornyl valerate |
| 2165 | Bornyl isovalerate |
| 2166 | Isobornyl isovalerate |
| 2167 | Boronia absolute (<i>Boronia megastigma</i> Nees) |
| 2168 | Brominated vegetable oils |
| 2169 | Buchu leaves oil (<i>Barosma</i> spp.) |
| 2170 | Methyl ethyl ketone |
| 2171 | Butter acids |
| 2172 | Butter esters |
| 2173 | Butter starter distillate |
| 2174 | n-Butyl acetate |
| 2175 | Isobutyl acetate |
| 2176 | Butyl acetoacetate |
| 2177 | Isobutyl acetoacetate |
| 2178 | Butyl alcohol |
| 2179 | Isobutyl alcohol |
| 2180 | Isobutyl angelate |
| 2181 | Butyl anthranilate |
| 2182 | Isobutyl anthranilate |
| 2183 | Butylated hydroxyanisole |
| 2184 | Butylated hydroxytoluene |
| 2185 | Isobutyl benzoate |
| 2186 | Butyl butyrate |
| 2187 | Isobutyl butyrate |
| 2188 | Butyl isobutyrate |
| 2189 | Isobutyl isobutyrate |
| 2190 | Butyl butyryllactate |
| 2191 | alpha-Butylcinnamaldehyde |
| 2192 | Butyl cinnamate |
| 2193 | Isobutyl cinnamate |
| 2194 | Butyl decylenate |
| 2195 | Butyl ethyl malonate |
| 2196 | Butyl formate |
| 2197 | Isobutyl formate |
| 2198 | Isobutyl furylpropionate |
| 2199 | Butyl heptanoate |
| 2200 | Isobutyl heptanoate |
| 2201 | Butyl caproate |
| 2202 | Isobutyl caproate |
| 2203 | Butylparaben |
| 2204 | 2-Butyl-5- or 6-keto-1,4-dioxane |
| 2205 | Butyl lactate |
| 2206 | Butyl laurate |
| 2207 | Butyl levulinate |
| 2208 | Isobutyl benzyl carbinol |

| FEMA | Material Name |
|------|---|
| 2209 | Butyl phenylacetate |
| 2210 | Isobutyl phenylacetate |
| 2211 | Butyl propionate |
| 2212 | Isobutyl propionate |
| 2213 | Isobutyl salicylate |
| 2214 | Butyl stearate |
| 2215 | Dibutyl sulfide |
| 2216 | Butyl 10-undecylenate |
| 2217 | Butyl valerate |
| 2218 | Butyl isovalerate |
| 2219 | Butyraldehyde |
| 2220 | Isobutyraldehyde |
| 2221 | Butyric acid |
| 2222 | Isobutyric acid |
| 2223 | Tributylin |
| 2224 | Caffeine |
| 2225 | Melaleuca cajuputi Powell |
| 2228 | Calcium acetate |
| 2229 | Camphene |
| 2230 | d-Camphor |
| 2231 | Camphor oil, Japanese, white, (<i>Cinnamomum camphora</i> (L.) Nees et Eberm.) |
| 2232 | Cananga oil (<i>Cananga odorata</i> Hook. f. and Thoms.) |
| 2233 | Capsicum extract (<i>Capsicum</i> spp.) |
| 2234 | Capsicum oleoresin (<i>Capsicum</i> spp.) |
| 2235 | Caramel color |
| 2236 | Caraway (<i>Carum carvi</i> L.) |
| 2237 | Caraway, black, oil (<i>Nigella sativa</i> L.) |
| 2238 | Caraway seed oil (<i>Carum carvi</i> L.) |
| 2239 | Carboxymethylcellulose |
| 2240 | Cardamom oil (<i>Elletaria cardamomum</i> (L.) Maton) |
| 2241 | Cardamom seed oil (<i>Elletaria cardamomum</i> (L.) Maton) |
| 2242 | Carmine (<i>Coccus cacti</i> L.) |
| 2243 | Carob bean extract (<i>Ceratonia siliqua</i> L.) |
| 2244 | Carrot seed oil (<i>Daucus carota</i> L.) |
| 2245 | Carvacrol |
| 2246 | Ethyl carvacrol |
| 2247 | Carveol |
| 2248 | 4-Carvomenthenol |
| 2249 | Carvone |
| 2250 | Carvyl acetate |
| 2251 | Carvyl propionate |
| 2252 | beta-Caryophyllene |
| 2253 | Cascara (<i>Rhamnus purshiana</i> DC.) extract (bitterless) |
| 2254 | Cascarilla bark extract (<i>Croton</i> spp.) |
| 2255 | Cascarilla bark oil (<i>Croton</i> spp.) |
| 2256 | Cassia (<i>Cinnamomum cassia</i> Blume) |
| 2257 | Cassia bark extract (<i>Cinnamomum cassia</i> Blume) |
| 2258 | Cassia Bark Oil |
| 2259 | Cassia buds (<i>Cinnamomum cassia</i> Blume) |
| 2260 | Cassie, absolute (<i>Acacia farnesiana</i> (L.) Willd.) |
| 2261 | Castoreum extract/resinoid (<i>Castor</i> spp.) |
| 2262 | Castoreum liquid (<i>Castor</i> spp.) |
| 2263 | Castor oil (<i>Ricinus communis</i> L.) |
| 2264 | Catechu extract (<i>Acacia catechu</i> Willd.) |
| 2265 | Catechu powder (<i>Acacia catechu</i> Willd.) |
| 2266 | Cayenne (<i>Capsicum annum</i> L. var. <i>longum</i> Sendt) |
| 2267 | Cedar leaf oil (<i>Thuja occidentalis</i> L.) |
| 2268 | Celery seed (<i>Apium graveolens</i> L.) |
| 2269 | Celery seed extract solid (<i>Apium graveolens</i> L.) |
| 2270 | Celery seed extract (<i>Apium graveolens</i> L.) |
| 2271 | Celery seed oil (<i>Apium graveolens</i> L.) |
| 2272 | Chamomile flower oil, English (<i>Anthemis nobilis</i> L.) |
| 2273 | Chamomile flower oil (Hungarian) (<i>Matricaria chamomilla</i> L.) |
| 2274 | Chamomile flower extract (Roman) (<i>Anthemis nobilis</i> L.) |
| 2275 | Chamomile flower oil (Roman) (<i>Anthemis nobilis</i> L.) |
| 2276 | Cherry bark extract (wild) (<i>Prunus serotina</i> Ehrh.) |
| 2277 | Cherry laurel oil (<i>Prunus laurocerasus</i> L.) (ffpa) |
| 2278 | Cherry pits extract (<i>Prunus</i> spp.) |
| 2279 | Chervil (<i>Anthriscus cerefolium</i> (L.) Hoffm.) |
| 2280 | Chicory extract (<i>Cichorium intybus</i> L.) |
| 2281 | Cinchona bark (red) (<i>Cinchona succirubra</i> Pav. or its hybrids) |

| FEMA | Material Name |
|------|---|
| 2282 | Cinchona bark extract (red) (Cinchona succirubra Pav. or its hybrids) |
| 2283 | Cinchona bark (yellow) (Cinchona spp.) |
| 2284 | Cinchona bark extract (yellow) (Cinchona spp.) |
| 2285 | Cinchona extract (Cinchona spp.) |
| 2286 | Cinnamic aldehyde |
| 2287 | Cinnamaldehyde ethylene glycol acetal |
| 2288 | Cinnamic acid |
| 2289 | Cinnamon (Cinnamomum spp.) |
| 2290 | Cinnamon bark extract (Cinnamomum spp.) |
| 2291 | Cinnamon bark oil (Cinnamomum spp.) |
| 2292 | Cinnamon leaf oil (Cinnamomum spp.) |
| 2293 | Cinnamyl acetate |
| 2294 | Cinnamic alcohol |
| 2295 | Cinnamyl anthranilate |
| 2296 | Cinnamyl butyrate |
| 2297 | Cinnamyl isobutyrate |
| 2298 | Cinnamyl cinnamate |
| 2299 | Cinnamyl formate |
| 2300 | Cinnamyl phenylacetate |
| 2301 | Cinnamyl propionate |
| 2302 | Cinnamyl isovalerate |
| 2303 | Citral |
| 2304 | Citral diethyl acetal |
| 2305 | Citral dimethyl acetal |
| 2306 | Citric acid |
| 2307 | Citronellal |
| 2308 | Citronella oil (Cymbopogon nardus Rendle) |
| 2309 | dl-Citronellol |
| 2310 | Citronellyloxyacetaldehyde |
| 2311 | Citronellyl acetate |
| 2312 | Citronellyl butyrate |
| 2313 | Citronellyl isobutyrate |
| 2314 | Citronellyl formate |
| 2315 | Citronellyl phenylacetate |
| 2316 | Citronellyl propionate |
| 2317 | Citronellyl valerate |
| 2318 | Citrus peels extract (Citrus spp.) |
| 2319 | Civet absolute (Viverra civetta Schreber, V. zibetha Schreber) |
| 2320 | Clary sage (Salvia sclarea L.) |
| 2321 | Clary sage oil (Salvia sclarea L.) |
| 2322 | Clove bud extract (Eugenia spp.) |
| 2323 | Clove bud oil (Eugenia spp.) |
| 2324 | Clove bud oleoresin (Eugenia spp.) |
| 2325 | Clove leaf oil (Eugenia spp.) |
| 2326 | Clover tops red extract solid (Trifolium pratense L.) |
| 2327 | Cloves (Eugenia spp.) |
| 2328 | Clove stem oil (Eugenia spp.) |
| 2329 | Coca leaf extract (decocainized) (Erythroxylon coca Lam.) |
| 2330 | Cochineal (Coccus cacti L.) |
| 2331 | Cognac oil, green |
| 2332 | Cognac oil, white |
| 2333 | Coriander (Coriandrum sativum L.) |
| 2334 | Coriander oil (Coriandrum sativum L.) |
| 2335 | Corn silk (Zea mays L.) |
| 2336 | Costus root oil (Saussurea lappa Clarke) |
| 2337 | p-Cresol |
| 2338 | Cubebbs (Piper cubeba L. f.) |
| 2339 | Cubeb oil (Piper cubeba L. f.) |
| 2340 | Cumin oil (Cuminum cyminum L.) |
| 2341 | Cuminaldehyde |
| 2342 | Cumin, black (Nigella sativa L.) |
| 2343 | Cumin seed oil (Cuminum cyminum L.) |
| 2344 | Curacao peel extract (Citrus aurantium L.) |
| 2345 | Curacao peel oil (Citrus aurantium L.) |
| 2346 | Black currant buds absolute (Ribes nigrum L.) |
| 2347 | Cyclohexaneacetic acid |
| 2348 | Cyclohexylethyl acetate |
| 2349 | Cyclohexyl acetate |
| 2350 | Cyclohexyl anthranilate |
| 2351 | Cyclohexyl butyrate |
| 2352 | Cyclohexyl cinnamate |
| 2353 | Cyclohexyl formate |

| FEMA | Material Name |
|------|--|
| 2354 | Cyclohexyl propionate |
| 2355 | Cyclohexyl isovalerate |
| 2356 | p-Cymene |
| 2357 | Dandelion fluid extract (Taraxacum spp.) |
| 2358 | Dandelion root solid extract (Taraxacum spp.) |
| 2359 | Davana oil (Artemisia pallens Wall.) |
| 2360 | gamma-Decalactone |
| 2361 | delta-Decalactone |
| 2362 | Decanal |
| 2363 | Decanal dimethyl acetal |
| 2364 | Decanoic acid |
| 2365 | 1-Decanol |
| 2366 | 2-Decenal |
| 2367 | Decyl acetate |
| 2368 | Decyl butyrate |
| 2369 | Decyl propionate |
| 2370 | Diacetyl |
| 2371 | Dibenzyl ether |
| 2372 | 4,4-Dibutyl-gamma-butyrolactone |
| 2373 | Dibutyl sebacate |
| 2374 | Diethyl malate |
| 2375 | Diethyl malonate |
| 2376 | Diethyl sebacate |
| 2377 | Diethyl succinate |
| 2378 | Diethyl tartrate |
| 2379 | Dihydrocarveol |
| 2380 | Dihydrocarvyl acetate |
| 2381 | Dihydrocoumarin |
| 2382 | Dill (Anethum graveolens L.) |
| 2383 | Dill oil (Anethum graveolens L.) |
| 2384 | Dill seed, Indian (Anethum spp.) |
| 2385 | m-Dimethoxybenzene |
| 2386 | p-Dimethoxybenzene |
| 2387 | 2,4-Dimethylacetophenone |
| 2388 | alpha,alpha-Dimethylbenzyl isobutyrate |
| 2389 | 2,6-Dimethyl-5-heptenal |
| 2390 | 2,6-Dimethyloctanal |
| 2391 | 3,7-Dimethyl-1-octanol |
| 2392 | alpha,alpha-Dimethylphenethyl acetate |
| 2393 | alpha,alpha-Dimethylphenethyl alcohol |
| 2394 | Dimethyl benzyl carbonyl butyrate |
| 2395 | alpha,alpha-Dimethylphenethyl formate |
| 2396 | Dimethyl succinate |
| 2397 | 1,3-Diphenyl-2-propanone |
| 2398 | Disodium phosphate |
| 2399 | Dittany of Crete (Origanum dictamnus L.) |
| 2400 | gamma-Dodecalactone |
| 2401 | delta-Dodecalactone |
| 2402 | 2-Dodecenal |
| 2403 | Doggrass extract/oil (Agropyron repens (L.) Beauv.) |
| 2404 | Dragon's blood extract (Daemonorops spp. or other botanical sources) |
| 2405 | Dulse (Rhodymenia palmata (L.) Grev.) |
| 2406 | Elder flowers oil (Sambucus canadensis L. or S. nigra L.) |
| 2407 | Elemi resinoid (Canarium spp.) |
| 2408 | Elemi oil/extract/resinoid (Canarium commune or C. luzonicum Miq.) |
| 2409 | Fleabane oil (Erigeron canadensis) |
| 2410 | Erythorbic acid |
| 2411 | Estragole |
| 2412 | Estragon oil (Artemisia dracunculus) |
| 2413 | p-Ethoxybenzaldehyde |
| 2414 | Ethyl acetate |
| 2415 | Ethyl acetoacetate |
| 2416 | Ethyl 2-acetyl-3-phenylpropionate |
| 2417 | Ethyl aconitate (mixed esters) |
| 2418 | Ethyl acrylate |
| 2419 | Ethyl alcohol |
| 2420 | Ethyl p-anisate |
| 2421 | Ethyl anthranilate |
| 2422 | Ethyl benzoate |
| 2423 | Ethyl benzoylacetate |
| 2424 | alpha-Ethylbenzyl butyrate |