

General list of ingredients and maximum concentration limits

This is a summary of ingredients that are present in Liqua and Aramax liquids currently sold in European Union with full compliance to the requirements of European Tobacco Products Directive 2014/40/EU (TPD). Limit of detection is 0.0001%. The actual content and concentration of each substance depends on the type of liquid, local country legislation and chemical legislation, such as REACH, and each liquid goes through the TPD notification process before being introduced for sales.

Ingredient	Maximum concentration
1-PENTN-3-OL	0.0750%
2-ACETYLFURAN	0.0009%
2-ACETYLPYRAZINE	0.2423%
2-ACETYLPYRIDINE	0.0123%
2-ACETYLPYRROLE	0.0002%
2-ACETHYLTHIAZOLE	0.1200%
2-HEPTANOL	0.0004%
2-HYDROXY-3-METHYLCYCLOPENT-2-ENONE	0.6160%
2-ISOPROPYL-4-METHYL THIAZOLE	0.0008%
2-ISOPROPYL-N,2,3-TRIMETHYLBUTANAMIDE	1.1772%
2-METHOXY-3-METHYLPYRAZINE	0.0006%
2-METHOXY-6-METHYLPYRAZINE	0.0026%
2-METHYL-2-PENTENOIC ACID	0.0092%
2-METHYLBUTYL ACETATE	0.0416%
2-METHYLBUTYL BUTYRATE	0.0082%
2-METHYLBUTYRIC ACID	0.0342%
2-METHYLTHIO-5-METHYLPYRAZINE	0.2850%
2-METHYLTHIO-6-METHYLPYRAZINE	0.0036%
2-METHYLVALERIC ACID	0.0005%
2-PHENYLETHANOL	0.0281%
2,3-DIETHYL-5-METHYLPYRAZINE	0.0015%
2,3,5-TRIMETHYLPYRAZINE	0.0109%
2,3,5,6-TETRAMETHYLPYRAZINE	0.0007%
2,5-DIMETHYLPYRAZINE	0.0005%
2,6,6-TRIMETHYLCYCLOHEX-2-ENE-1,4-DIONE	0.0390%
2,3-DIMETHYL PYRAZINE	0.0049%
3-ACETYL PYRIDINE	0.0003%
3-ETHYL-2-HYDROXY-2-CYCLOPENTEN-1-ONE	0.0022%
3-HYDROXY-2-BUTANONE	0.0005%
3-METHYLBUTYL 3-METHYLBUTANOATE	0.0738%

3-OCTANOL	0.0090%
3-PHENYL-2-PROPEN-1-OL	0.0100%
3,4-HEXANEDIONE	0.0006%
4-ETHYL-2-METHOXYPHENOL	0.0420%
4-HYDROXY-5-METHYL-3-FURANONE	0.0169%
4-METHOXYACETOPHEONE	0.0003%
4-METHOXYPHENYLMETHANOL	0.0200%
4-METHYL-5-THIAZOLEETHANOL	0.0561%
4-METHYL-5-THIAZOLYLETHYL ACETATE	0.0052%
5-HYDROXYMETHYL FURFURAL	0.0070%
5-METHYLFURFURAL	0.0075%
5,6,7,8-TETRAHYDROQUINOXALINE	0.0005%
6-METHYL-5-HEPTEN-2-ONE	0.0017%
ACETIC ACID	0.5395%
ACETIC ACID, PHENYLMETHYL ESTER	0.0840%
ACETOPHENONE	0.0109%
ALLYL CYCLOHEXYLPROPIONATE	0.0150%
ALLYL HEPTANOATE	0.0363%
ALLYL HEXANOATE	0.0333%
ALPHA-ANGELICA LACTONE	0.0007%
ALPHA-IONONE	0.0140%
ALPHA-PENTYL CINNAMALDEHYDE	0.0014%
ALPHA-PINENE	0.0244%
ALPHA-TERPINEOL	0.0540%
ALPHA,ALPHA-DIMETHYLPHENETHYL ACETATE	0.0011%
ALPHA,ALPHA-DIMETHYLPHENETHYL BUTYRATE	0.0300%
AMMONIUM CHLORIDE	0.4500%
AMYL ACETATE	0.0309%
ANETHOLE	0.0996%
ANISYL ACETATE	0.0011%
ASCABIOL	0.0100%
BETA-CARYOPHYLLENE	0.0095%
BETA-DAMASCENONE	0.0101%
BETA-DAMASCONE	0.0290%
BETA-ELEMENE	0.0013%
BETA-IONONE	0.2400%
BETA-OCIMENE	0.0100%
BETA-PINENE	0.0358%

BUTANAL	0.0015%
BUTANOL	0.0210%
BUTYL 2-METHYLBUTANOATE	0.0002%
BUTYL ACETATE	0.2230%
BUTYL BUTYRATE	0.0098%
BUTYL BUTYRYL LACTATE	0.0017%
BUTYL FORMATE	0.0009%
BUTYL ISOVALERATE	0.0016%
BUTYRIC ACID	0.0814%
CARVONE	0.7000%
CINEOLE	0.0218%
CINNAMALDEHYDE	0.0049%
CINNAMYLACETATE	0.0006%
CINNAMYLPROPIONATE	0.0012%
CIS-3-HEXEN-1-OL	0.3300%
CIS-3-HEXENYL ACETATE	0.3231%
CIS-3-HEXENYL BUTYRATE	0.0071%
CIS-3-HEXENYL ISOVALERATE	0.0326%
CIS-3-HEXENYL LACTATE	0.0024%
CIS-3-HEXENYL-2-METHYLBUTYRATE	0.0000%
CIS-6-NONENAL	0.0100%
CIS-6-NONENOL	0.0013%
CITRAL	0.0975%
CITRONELLAL	0.0001%
CITRONELLOL	0.0330%
CITRONELLYL ACETATE	0.1950%
COCAL	0.0700%
DAMASCENONE	0.0240%
DECANAL	0.0006%
DECANOIC ACID	0.0076%
DECANOL	0.0031%
DELTA-DECALACTONE	0.1800%
DELTA-DODECALACTONE	0.0963%
DELTA-HEXALACTONE	0.0056%
DELTA-NONALACTONE	0.0049%
DELTA-UNDECANOLACTONE	0.0022%
DIETHYL MALONATE	0.0316%
DIETHYL SEBACATE	0.0402%

DIETHYL SUCCINATE	0.0301%
DIFURFURYLDISULFIDE	0.0005%
DIHYDROCARVEOL ACETATE	0.0002%
DIHYDROCOUMARIN	0.0035%
DIHYDROLINALOOL	0.0004%
ETHANOL	12.8548%
ETHYL 2-METHYLBUTYRATE	0.1960%
ETHYL 2,4-DECADIENOATE	0.0028%
ETHYL 3-HYDROXYBUTYRATE	0.0121%
ETHYL ACETATE	2.5240%
ETHYL ACETOACETATE	0.0800%
ETHYL BENZENECARBOXYLATE	0.0015%
ETHYL BUTYRATE	0.7864%
ETHYL CINNAMATE	0.0007%
ETHYL CROTONATE	0.0031%
ETHYL CYCLOPENTENOLONE	0.0022%
ETHYL DECANOATE	0.0038%
ETHYL FORMATE	0.0135%
ETHYL HEPTANOATE	0.0220%
ETHYL HEXADECANOATE	0.0012%
ETHYL HEXANOATE	0.1260%
ETHYL ISOBUTYRATE	0.0555%
ETHYL ISOVALERATE	0.0626%
ETHYL LACTATE	0.5320%
ETHYL LAURATE	0.0024%
ETHYL LEVULINATE	1.2500%
ETHYL MALTOL	1.9180%
ETHYL MYRISTATE	0.0016%
ETHYL NONANOATE	0.0053%
ETHYL OCTANOATE	0.0040%
ETHYL OLEATE	0.0006%
ETHYL PHENYLACETATE	0.0026%
ETHYL PROPIONATE	0.1677%
ETHYL SALICYCLATE	0.0038%
ETHYL VANILLIN	0.7568%
ETHYL VANILLIN PROPYLENE GLYCOL ACETAL	0.0021%
ETHYL-3-PHENYL GLYCIDATE	0.0030%
EUGENOL	0.0137%

EUGENOL ACETATE	0.0011%
FORMIC ACID, PHENYLMETHYL ESTER	0.0360%
FRAESEOL	0.0061%
FRAISTONE	0.0015%
FRUCTONE	0.0006%
FURANEOL	1.6800%
FURFURYL THIOACETATE	0.0003%
GAMMA-DECALACTONE	0.1372%
GAMMA-DODECALACTONE	0.0700%
GAMMA-HEPTALACTONE	0.0050%
GAMMA-HEXALACTONE	0.0160%
GAMMA-NONALACTONE	0.0478%
GAMMA-OCTALACTONE	0.0425%
GAMMA-UNDECALACTONE	0.0137%
GERANIOL	0.0750%
GERANYL ACETATE	0.0336%
GERANYL BUTYRATE	0.0012%
GERANYL ISOBUTYRATE	0.0004%
GERANYL PROPIONATE	0.0187%
GERANYLACETONE	0.0019%
GLYCERIN TRIACETATE	2.1193%
GLYCERINE	75.0000%
GLYCINE	0.0009%
GUAIACOL	0.0450%
HEPTANOL	0.0004%
HEXANAL	0.0780%
HEXANAL PROPYLENE GLYCOL ACETAL	0.0144%
HEXANOIC ACID	0.0413%
HEXANOL	0.1474%
HEXYL 2-METHYLBUTYRATE	0.0010%
HEXYL ACETATE	0.1967%
HEXYL BUTYRATE	0.0050%
HEXYL HEXANOATE	0.0045%
HOMOFURANEOL	0.0044%
INDOLE	0.0320%
ISOAMYL ACETATE	0.1908%
ISOAMYL BUTYRATE	0.0583%
ISOAMYL ISOBUTYRATE	0.0086%

ISOAMYL PROPIONATE	0.0002%
ISOBUTYL ACETATE	0.7390%
ISOBUTYL PROPIONATE	0.0280%
ISOBUTYRIC ACID	0.0021%
ISOEUGENOL	0.0007%
ISOPENTANOL	0.0900%
ISOPROPANOL	4.8000%
ISOPULEGOL	0.0210%
JASMONE	0.1200%
LAURIC ACID	0.0014%
LIMONENE	0.1200%
LINALOOL	0.1217%
LINALOOL OXIDE	0.1800%
LINALYL ACETATE	0.0106%
LINALYL ISOBUTYRATE	0.0036%
MALTOL	0.7000%
MELONAL	0.0109%
MENTHOL	2.2960%
MENTHONE	0.2800%
MENTHYL ACETATE	0.0001%
METHYL 2-FUROATE	0.0034%
METHYL 2-METHYLBUTYRATE	0.0441%
METHYL 3-METHYLTHIOPROPIONATE	0.0056%
METHYL ANTHRANILATE	0.1280%
METHYL BENZOATE	0.0142%
METHYL BUTYRATE	0.0016%
METHYL CINNAMATE	0.0890%
METHYL DIHYDROJASMONATE	0.1800%
METHYL GUAIACOL	0.0040%
METHYL N-METHYL ANTHRANILATE	0.0043%
METHYL P-TERT-BUTYLPHENYLACETATE	0.0018%
METHYL PHENYLACETATE	0.0018%
METHYL SALICYLATE	0.1950%
METHYL THIOBUTYRATE	0.0006%
METHYL TRANS-2-NONENOATE	0.0010%
METHYL VANILLIN	0.4995%
MYRCENE	0.0999%
N-ETHYL-P-MENTHANE-3-CARBOXAMIDE	0.0467%

NEO-ALLOOCIMENE	0.0025%
NEROL	0.0450%
NEROLIDOL	0.0017%
NERYL ACETATE	0.2100%
NICOTINE	1.7544%
NONANAL	0.0013%
OCTANAL	0.0013%
OCTANOIC ACID	0.0001%
OCTANOL	0.0026%
OCTYL ACETATE	0.0001%
P-ANISALDEHYDE	0.0300%
P-MENTHA-8-THIOL-3-ONE	0.0002%
PALMITIC ACID	0.0018%
PENTANOIC ACID 3-METHYLBUTYL ESTER	0.0065%
PERILLAL	0.0065%
PERILLARTINE	0.0480%
PHENETHYL PHENYLACETATE	0.0034%
PHENYLCARBINOL	0.7949%
PHENYLMETHANAL	0.2790%
PIPERITONE	0.0816%
PIPERONAL	0.0765%
PIPERONAL PROPYLENE GLYCOL ACETAL	0.0119%
PROPANOIC ACID, PHENYLMETHYL ESTER	0.0024%
PROPENYL GUAETHOL	0.0012%
PROPIONIC ACID	0.0319%
PROPYL ACETATE	0.0021%
PROPYLENE GLYCOL	49.9988%
PULEGONE	0.0210%
RASPBERRY KETONE	0.0604%
ROSE OXIDE	0.0011%
SOTOLONE	0.3500%
STYRALYL ACETATE	0.0166%
SUCRALOSE	0.1000%
TABANONE	0.0006%
TERPINOLENE	0.0010%
TERPINYL ACETATE	0.0006%
THEOBROMINE	0.0032%
TRANS-2-HEXENAL	0.0734%

TRANS-2-HEXENAL PROPYLENE GLYCOL ACETAL	0.0840%
TRANS-2-HEXENOIC ACID	0.0072%
TRANS-2-HEXENOL	0.0241%
TRANS-2-HEXENYL ACETATE	0.0029%
TRANS-CINNAMALDEHYDE	0.0120%
TRANS,TRANS-2,4-HEPTADIENAL	0.0112%
TRIETHYL CITRATE	0.4500%
VANILLIN	0.9000%
VANILLIN PROPYLENEGLYCOL ACETAL	0.1792%
WATER	4.0500%
XYLITOL	0.2420%