OTHER MEDIA detection (d) and recognition (r) flavour or taste threshold values, if not indicated otherwise, in mg/kg

A

abhexone⇒5-ETHYL-3-HYDROXY-4-METHYL-2(5*H)*-FURANONE
acetal⇒1,1-DIETHOXYETHANE
acetaldehyde⇒ETHANAL
acetaldehyde diethyl acetal⇒1,1-DIETHOXYETHANE

ACETIC ACID (ethanoic acid) *[64-19-7]*

Hvolby (1961)	d	2	coconut oil
Harrison (1963)	d	100	degassed beer
Gilliland & Harrison (1966); Harrison (1967);			
Harrison & Collins (1968)	d	200	degassed beer
Gilliland & Harrison (1967)	d	40	degassed beer
Forss & Patton (1966)		10	liquid milk fat
Forss & Patton (1966)		10	solid milk fat
Siek *et al.* (1969)		7	deodorized butteroil
Shaw *et al.* (1970)		110	instant orange juice
Urbach *et al.* (1970,1972)		5	synthetic butter
Engan (1974)		200	all-malt Pilsener beer
Canales & Cantu (1974);			
Meilgaard (1975a,b,c;1982a)	d	150 - 175	(lager) beer
Sandra & Verzele (1975)		200	beer
Anon. (1979,1980,1981);			
Meilgaard *et al.* (1982)		60 - 120	pale lager beers
Corison *et al.* (1979)	d	1,130	white table wine
Corison *et al.* (1979)	d	790	red table wine
Shibamoto *et al.* (1980)		14	emulsion
Maier & Kuhr (1992)	r	58	chicory solution
Guth & Grosch (1993)	d	1.05	sunflower oil
Guth (1997)	d	200	water/ethanol 90+10 v/v
Reiners & Grosch (1998)	d	0.378	refined sunflower oil
Anon. (1999)		71	American lager
Stephan & Steinhart (1999)	r	1.75	refined vegetable oil
Kotseridis & Baumes (2000)		1	11 % ethanol, 4 g/l tartaric acid, pH 3.5
Morales *et al.* (2000)		0.50	fully refined olive oil

acetoin⇒3-HYDROXY-2-BUTANONE
acetol⇒1-HYDROXYPROPANONE
acetone⇒PROPANONE

ACETOPHENONE *[98-86-2]*

Meilgaard *et al.* (1970); Meilgaard (1975b,c)	d	3.0	beer

acetosyringone⇒1-(4-HYDROXY-3,5-DIMETHOXYPHENYL)ETHANONE
acetovanillon⇒1-(4-HYDROXY-3-METHOXYPHENYL)ETHANONE

(*Z*,*Z*)-1-ACETOXY-2,4-DIHYDROXY-12,15-HENEICOSADIENE

Degenhardt & Hofmann (2010)	r	0.002 **mM** (kokumi enhancement)	model broth

1-ACETOXY-2,4-DIHYDROXY-16-HEPTADECENE

Degenhardt & Hofmann (2010)	r	3.0 (kokumi enhancement)	model broth

1-ACETOXY-2,4-DIHYDROXY-16-HEPTADECYNE

Degenhardt & Hofmann (2010)	r	1.6 (kokumi enhancement)	model broth

(*Z*,*Z*)-1-ACETOXY-2-HYDROXY-4-OXO-12,15-HENEOCOSADIENE

Degenhardt & Hofmann (2010)	r	0.002 **mM** (kokumi enhancement)	model broth

OTHER MEDIA detection (d) and recognition (r) flavour or taste threshold values, if not indicated otherwise, in mg/kg

(*Z,Z,Z*)-1-ACETOXY-2-HYDROXY-4-OXO-5,12,15-HENEICOSATRIENE

Degenhardt & Hofmann (2010)	r	0.002 **mM** (kokumi enhancement)	model broth

1-ACETOXY-2-HYDROXY-4-OXOHEPTADECANE

Degenhardt & Hofmann (2010)	r	0.017 **mM** (kokumi enhancement)	model broth

1-ACETOXY-2-HYDROXY-4-OXO-16-HEPTADECENE

Degenhardt & Hofmann (2010)	r	0.011 **mM** (kokumi enhancement)	model broth

1-ACETOXY-2-HYDROXY-4-OXO-12-OCTADECENE

Degenhardt & Hofmann (2010)	r	0.005 **mM** (kokumi enhancement)	model broth

acetylformoin⇒4-HYDROXY-2,3,5-HEXANETRIONE

2-ACETYLFURAN (2-furyl methyl ketone) *[1192-62-7]*

Shaw *et al.* (1970)		110	instant orange juice
Meilgaard (1975b,c)	d	80	beer
Shibamoto *et al.* (1980)		0.5	emulsion
Saison *et al.* (2009)	d	0.513	carbonated beer served at 7-8 °C

2-ACETYLPYRIDINE *[1122-62-9]*

Harding *et al.* (1977)	r	0.1	light ale

3-ACETYLPYRIDINE *[350-03-8]*

Harding *et al.* (1977)	r	0.5	light ale

2-ACETYLPYRROLE *[1072-83-9]*

Shaw *et al.* (1970)		200	instant orange juice

2-ACETYLTHIOPHENE *[88-15-3]*

Golovnja & Rothe (1980)	d	0.000 3	2 % protein hydrolysate
Golovnja & Rothe (1980)	d	1	skim milk

acrolein⇒PROPENAL
active amyl acetate⇒2-METHYLBUTYL ACETATE
active amyl alcohol⇒2-METHYL-1-BUTANOL
active amyl formate⇒2-METHYLBUTYL FORMATE
adenosine-5'-monophosphate⇒ADENOSINE 5'-MONOPHOSPHATE SODIUM SALT

ADENOSINE-5'-MONOPHOSPHATE SODIUM SALT (adenosine-5'-monophosphate, sodium adenosine 5'-monophosphate, AMP) *[149022-20-8]*

Gutzeit-Walz & Solms (1971)	d	4	0.1 % L-glutamic acid
Steward *et al.* (1974)	d	> 30	lager-type beer

aldehyde C14⇒TETRADECANAL
aldehyde C16⇒ETHYL 3-METHYL-3-PHENYL-2,3-EPOXYPROPANOATE
aldol⇒3-HYDROXYBUTANAL
alliin⇒(*S*)-3-(2-PROPENYLSULPHINYL)-L-ALANINE
allocyclocitral⇒3,4-DIMETHYL-1,3-CYCLOHEXENECARBOXALDEHYDE

4-ALLYL-1,2-DIMETHOXYBENZENE (methyleugenol, eugenol methyl ether, 4-allylveratrole) *[93-15-2]*

Moshonas & Shaw (1978)	d	1.25	orange juice

4-ALLYL-2,6-DIMETHOXYPHENOL *[6627-88-9]*

Chatonnet *et al.* (1992b)	d	3	model solution
Chatonnet *et al.* (1992b)	d	12	white wine
Chatonnet *et al.* (1992b)	d	9	red wine

OTHER MEDIA detection (d) and recognition (r) flavour or taste threshold values, if not indicated otherwise, in mg/kg

allyl mercaptan⇒2-PROPENE-1-THIOL

4-ALLYL-2-METHOXYPHENOL (eugenol) *[97-53-0]*

Moshonas & Shaw (1978)	d	0.022	orange juice
Anon. (1978,1979,1980,1981);			
Meilgaard *et al.* (1982)		0.040	pale lager beers
Wackerbauer *et al.* (1982)		0.020	beer
Boidron *et al.* (1988);Chatonnet *et al.* (1992b)	d	0.015	model solution
Boidron *et al.* (1988);Chatonnet *et al.* (1992b)	d	0.1	white wine
Boidron *et al.* (1988);Chatonnet *et al.* (1992b)	d	0.5	red wine
Guth (1997)	d	0.005	water/ethanol 90+10 v/v
Ferreira *et al.* (2000)		0.006	11 % eth., 7 g/l glycerin, 5 g/l t.acid, pH 3.4
Sterckx *et al.* (2011)	d	0.044	Belgian beer

5-ALLYL-1,2,3-TRIMETHOXYBENZENE (elemicine) *[487-11-6]*

Moshonas & Shaw (1978)	d	22	orange juice

4-allylveratrole⇒4-ALLYL-1,2-DIMETHOXYBENZENE

ALUMINUM CHLORIDE *[7446-70-0, 7784-13-6]*

Böröcz-Szabó (1985)	250 - 500 *)	sour-cherry beverage
Böröcz-Szabó (1985)	50 - 100 *)	apple beverage
Böröcz-Szabó (1985)	25 - 50 *)	white wine
Böröcz-Szabó (1985)	20 - 25 *)	red wine
Böröcz-Szabó (1985)	50 - 100 *)	butter pear liqueur
Böröcz-Szabó (1985)	12.5 - 25 *)	beer
Böröcz-Szabó (1985)	25 - 50 *)	milk
	*) expressed in mg Al/kg	

ALUMINUM SULPHATE *[10043-01-3, 7784-31-8]*

Böröcz-Szabó (1985)	250 - 500 *)	sour-cherry beverage
Böröcz-Szabó (1985)	100 - 250 *)	apple beverage
Böröcz-Szabó (1985)	25 - 50 *)	white wine
Böröcz-Szabó (1985)	20 - 25 *)	red wine
Böröcz-Szabó (1985)	100 - 150 *)	butter pear liqueur
Böröcz-Szabó (1985)	25 - 50 *)	beer
Böröcz-Szabó (1985)	25 - 50 *)	milk
	*) expressed in mg Al/kg	

AMINOACETIC ACID (glycine, glycocoll) *[56-40-6]*

Harrison & Collins (1968)	d	> 500	degassed beer

2'-AMINOACETOPHENONE *[551-93-9]*

Parks *et al.* (1964)		0.000 4	skim-milk
Meilgaard (1975b)	d	0.005	beer

(*S*)-(+)-AMINOBUTANEDIOIC ACID (L-aspartic acid) *[56-84-8]*

Harrison & Collins (1968)	d	> 250	degassed beer

(*S*)-(-)-2-AMINO-3-INDOLYLPROPANOIC ACID (L-tryptophane) *[73-22-3]*

Harrison & Collins (1968)	d	> 250	degassed beer

(*S*)-(+)-2-AMINO-3-METHYLBUTANOIC ACID (L-valine) *[72-18-4]*

Harrison & Collins (1968)	d	> 250	degassed beer

2-AMINO-3-METHYLPENTANOIC ACID (isoleucine) *[443-79-8]*

OTHER MEDIA detection (d) and recognition (r) flavour or taste threshold values, if not indicated otherwise, in mg/kg

Mocek (1971)		265	beer

(*S*)-(+)-2-AMINO-4-METHYLPENTANOIC ACID (L-leucine) *[61-90-5]*

Wieser & Belitz (1975)	r	5,900 - 6,560	10 % ethanol (bitter taste)

(*S*)-(+)-2-AMINO-4-(METHYLTHIO)BUTANOIC ACID (L-methionine) *[63-68-3]*

Harrison & Collins (1968)	d	100	degassed beer

(*S*)-(+)-2-AMINOPENTANEDIOC ACID (L-glutamic acid) *[56-86-0]*

Harrison & Collins (1968)	d	250	degassed beer
Schiffman *et al.* (1991)	d	253	pH 7.0 with NaOH
Schiffman *et al.* (1991)	r	839	pH 7.0 with NaOH
Schiffman *et al.* (1991)	d	219	0.5 mM NaCl
Schiffman *et al.* (1991)	r	475	0.5 mM NaCl
Schiffman *et al.* (1991)	d	218	3 mM NaCl
Schiffman *et al.* (1991)	r	353	3 mM NaCl
Schiffman *et al.* (1991)	d	145	0.5 mM NaAc
Schiffman *et al.* (1991)	r	293	0.5 mM NaAc
Schiffman *et al.* (1991)	d	256	3 mM NaAc
Schiffman *et al.* (1991)	r	399	3 mM NaAc
Schiffman *et al.* (1991)	d	146	0.5 mM KCl
Schiffman *et al.* (1991)	r	231	0.5 mM KCl
Schiffman *et al.* (1991)	d	306	3 mM KCl
Schiffman *et al.* (1991)	r	484	3 mM KCl
Schiffman *et al.* (1991)	d	163	0.5 mM KAc
Schiffman *et al.* (1991)	r	227	0.5 mM KAc
Schiffman *et al.* (1991)	d	236	3 mM KAc
Schiffman *et al.* (1991)	r	498	3 mM KAc
Schiffman *et al.* (1991)	d	133	0.5 mM CaCl2
Schiffman *et al.* (1991)	r	212	0.5 mM CaCl2
Schiffman *et al.* (1991)	d	175	3 mM CaCl2
Schiffman *et al.* (1991)	r	284	3 mM CaCl2
Schiffman *et al.* (1991)	d	149	0.5 mM CaAc2
Schiffman *et al.* (1991)	r	281	0.5 mM CaAc2
Schiffman *et al.* (1991)	d	210	3 mM CaAc2
Schiffman *et al.* (1991)	r	355	3 mM CaAc2

(*S*)-(-)-2-AMINO-3-PHENYLPROPANOIC ACID (L-phenylalanine) *[63-91-2]*

Harrison & Collins (1968)	d	> 250	degassed beer
Wieser & Belitz (1975)	r	2,640 - 3,300	10 % ethanol: bitter taste
Soldo *et al.* (2003)	r	2,650	equimolar (*R/S*)-alapyridaine, pH 7.0
Soldo & Hofmann (2005)	d	8,260	equimolar 1-(carboxymethyl)-5-hydroxy-2-hydroxymethylpyridinium inner salt (pH 7.0)

(*S*)-(+)-2-AMINOPROPANOIC ACID (L-alanine) *[56-41-7]*

Hofmann *et al.* (2005)	d	540	equimolar (+)-(*S*)-alapyridaine, pH 5.0
Hofmann *et al.* (2005)	d	270	equimolar (+)-(*S*)-alapyridaine, pH 7.0
Hofmann *et al.* (2005)	d	135	equimolar (+)-(*S*)-alapyridaine, pH 9.0

AMMONIA *[7664-41-7]*

Balavoine (1948b)		67	1 % sugar solution
Balavoine (1948b)		200	5 % sugar solution
Balavoine (1948b)		100	1 % salt solution
Balavoine (1948b)		200	5 % salt solution
Campbell *et al.* (1958)	d	> 104	coffee brew
Cole *et al.* (1961)		6.8	milk

OTHER MEDIA detection (d) and recognition (r) flavour or taste threshold values, if not indicated otherwise, in mg/kg

AMMONIUM CHLORIDE *[12125-02-9]*

Purdum (1942)		1.2 - 1.8 10^3	10 % syrup of glycyrrhiza
Purdum (1942)		1.2 - 1.8 10^3	10 % syrup of raspberry
Purdum (1942)		1.2 - 1.8 10^3	10 % syrup of orange flowers
Purdum (1942)		1.2 - 1.8 10^3	10 % syrup of citric acid
Purdum (1942)		1.2 - 1.8 10^3	10 % syrup of tolu balsem
Purdum (1942)		1.2 - 1.8 10^3	10 % syrup of acacia
Purdum (1942)		1.2 - 1.8 10^3	10 % syrup of orange
Purdum (1942)		1.2 - 1.8 10^3	10 % aromatic syrup of eriodictyon
Purdum (1942)		1.2 - 1.8 10^3	10 % syrup of cherry
Purdum (1942)		1.2 - 1.8 10^3	10 % syrup of cocoa, N.F.V.
Purdum (1942)		1.2 - 1.8 10^3	10 % syrup of prepared cocoa, N.F.VI.
Purdum (1942)		1.2 - 1.8 10^3	10 % syrup of thyme
Purdum (1942)		1.2 - 1.8 10^3	10 % syrup of wild cherry
Purdum (1942)		1.2 - 1.8 10^3	10 % syrup of cinnamon
Purdum (1942)		1.2 - 1.8 10^3	10 % syrup of althea
Purdum (1942)		1.2 - 1.8 10^3	10 % elixer of glycyrrhiza
Purdum (1942)		1.2 - 1.8 10^3	10 % compound syrup of sarsaparilla
Purdum (1942)		0.8 - 1.2 10^3	10 % aromatic elixer
Purdum (1942)		1.2 - 1.8 10^3	10 % syrup (simple)
Lankford & Becker (1951a)		1.8 - 2.7 10^3	16.7 % raspberry syrup, N.F.
Lankford & Becker (1951a)		1.8 - 2.7 10^3	16.7 % imitation raspberry syrup, acid added
Lankford & Becker (1951a)		1.8 - 2.7 10^3	16.7 % imitation wild cherry syrup, acid added
Lankford & Becker (1951a)		1.8 - 2.7 10^3	16.7 % imitation grape syrup, acid added
Lankford & Becker (1951a)		1.8 - 2.7 10^3	16.7 % cacao syrup, N.F.
Lankford & Becker (1951a)		2.7 10^3	16.7 % cherry syrup, N.F.
Lankford & Becker (1951a)		2.7 10^3	16.7 % imitation maple syrup
Lankford & Becker (1951a)		1.2 - 1.8 10^3	16.7 % glycyrrhiza syrup, U.S.P.
Lankford & Becker (1951a)		1.2 - 1.8 10^3	16.7 % imitation butterscotch syrup
Lankford & Becker (1951a)		1.2 - 1.8 10^3	16.7 % aromatic eriodictyon syrup, N.F.
Lankford & Becker (1951a)		1.2 - 1.8 10^3	16.7 % imitation coconut syrup
Lankford & Becker (1951a)		1.2 - 1.8 10^3	16.7 % imitation cream soda syrup
Lankford & Becker (1951a)		1.2 - 1.8 10^3	16.7 % imitation wild cherry syrup
Lankford & Becker (1951a)		1.2 - 1.8 10^3	16.7 % imitation grape syrup
Lankford & Becker (1951a)		1.2 - 1.8 10^3	16.7 % imitation root beer syrup
Lankford & Becker (1951a)		1.2 - 1.8 10^3	16.7 % imitation raspberry syrup
Lankford & Becker (1951a)		0.8 - 1.2 10^3	16.7 % simple syrup, U.S.P.

AMMONIUM GLUTAMATE (monoammonium glutamate) *[7558-63-6]*

Schiffman *et al.* (1991)	r	41 - 95	0.1 mM IMP
Schiffman *et al.* (1991)	r	11 - 44	1 mM IMP
Schiffman (1993)	d	23 - 76	0.1 mM IMP
Schiffman (1993)	d	5.6 - 21	1 mM IMP

AMMONIUM IRON(III) CITRATE (ferric ammonium citrate) *[1185-57-5]*

Cross & Kearsly (1984)	r	45.0	water adjusted to pH 9
Cross & Kearsly (1984)	r	2.5	0.28 M sorbitol, pH 5.4
Cross & Kearsly (1984)	r	2.6	0.28 M lactose, pH 5.3
Cross & Kearsly (1984)	r	3.7	0.28 M fructose, pH 5.4
Cross & Kearsly (1984)	r	3.9	0.28 M sucrose, pH 5.5
Cross & Kearsly (1984)	r	4.2	0.28 M glucose, pH 5.4
Cross & Kearsly (1984)	r	6.1	0.28 M maltose, pH 5.4
Cross & Kearsly (1984)	r	168.1	0.28 M sorbitol, pH 7.7
Cross & Kearsly (1984)	r	64.4	0.28 M lactose, pH 7.9
Cross & Kearsly (1984)	r	97.0	0.28 M fructose, pH 7.7
Cross & Kearsly (1984)	r	248.7	0.28 M sucrose, pH 8.0
Cross & Kearsly (1984)	r	134.0	0.28 M glucose, pH 8.0

Cross & Kearsly (1984)	r	140.0	0.28 M maltose, pH 7.5
Cross & Kearsly (1984)	r	54.5	0.43 M sorbitol, pH 7.7
Cross & Kearsly (1984)	r	56.2	0.56 M lactose, pH 7.9
Cross & Kearsly (1984)	r	62.8	0.19 M fructose, pH 7.7
Cross & Kearsly (1984)	r	54.4	0.15 M sucrose, pH 8.0
Cross & Kearsly (1984)	r	66.5	0.46 M glucose, pH 8.0
Cross & Kearsly (1984)	r	55.1	0.34 M maltose, pH 7.5

AMP⇒ADENOSINE 5'-MONOPHOSPHATE SODIUM SALT
amyl acetate⇒PENTYL ACETATE
amyl alcohol⇒1-PENTANOL
amyl butyrate⇒PENTYL BUTANOATE
amyl mercaptan⇒1-PENTANETHIOL
tert-amyl mercaptan⇒2-METHYL-2-BUTANETHIOL
amyl propionate⇒PENTYL PROPANOATE

5α-ANDROST-16-EN-3-ONE *[18339-16-7]*

Lunde *et al.* (2010)		5	minced meat

anethole⇒1-METHOXY-4-PROPENYLBENZENE
anethole trithione⇒5-(4-METHOXYPHENYL)-3*H*-1,3-DITHIOLE-3-THIONE
arachidonic acid⇒(Z,Z,Z,Z)-5,8,11,14-EICOSATETRAENOIC ACID

ASPARTAME (L-aspartyl-L-phenylalanine methyl ester) *[22839-47-0]*

Van Gemert *et al.* (1986)	d	15 - 36	buffer-pH 6 (5 - 40°C)
Van Gemert *et al.* (1986)	d	40 - 62	buffer-pH 3 (5 - 40°C)
Van Gemert *et al.* (1986)	d	40	coffee (65°C)
Van Gemert *et al.* (1986)	d	17	tea (65°C)
Van Gemert *et al.* (1986)	d	16	yoghurt drink (10°C)
Pastor *et al.* (1994)	d	13	0.15 % guar
Pastor *et al.* (1994)	r	24	0.15 % guar
Pastor *et al.* (1994)	d	16	0.10 % xanthan
Pastor *et al.* (1994)	r	26	0.10 % xanthan

L-aspartic acid⇒(*S*)-(+)-AMINOBUTANEDIOIC ACID
L-aspartyl-L-phenylalanine methyl ester⇒ASPARTAME

3-(3-AZABUTYL)INDOLE (N-methyl tryptamine) *[61-49-4]*

Charalambous *et al.* (1972)		20	beer

4-(3-AZABUTYL)PHENOL (N-methyl tyramine) *[29908-03-0]*

Charalambous *et al.* (1972)		20	beer

B

BENZALDEHYDE *[100-52-7]*

Badings (1970)		3.6	paraffin oil
Meilgaard *et al.* (1970); Meilgaard (1975b,c)	d	1.5 - 3	beer
Bandion *et al.* (1976)	r	5 - > 12	stone-fruit juices
Bandion *et al.* (1976)	r	> 6.4	stone-fruit brandy
Bandion *et al.* (1976)	r	< 10	stone-fruit liqueur
Jeon *et al.* (1978)		0.3	milk
Simpson (1978b)		3.0	wine
Van den Ouweland & Schutte (1978)		0.4	o/w emulsion
Van den Ouweland & Schutte (1978)		0.6	textured soy protein
Van den Ouweland & Schutte (1978)		2.0	meat
Anon. (1980,1981); Meilgaard *et al.* (1982)		1	pale lager beers
Saison *et al.* (2009)	d	0.515	carbonated beer served at 7-8 °C