

**WATER**

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**ABSINTHIN [1362-42-1]**

Korte (1957)	r	0.1
Schneider & Mielke (1979)	r	0.08

H-γ-Abu-NH-cyclohexyl⇒4-AMINOBTANOIC ACID CYCLOHEXYLAMIDE

γ-Abu-OMe.HCl⇒METHYL 4-AMINOBTANOATE HYDROCHLORIDE

H-γ-Abu-NH-phenyl⇒4-AMINOBTANOIC ACID PHENYLAMIDE

H-ε-Aca-NH-cyclohexyl⇒6-AMINOHEXANOIC ACID CYCLOHEXYLAMIDE

H-ε-Aca-NH-phenyl⇒6-AMINOHEXANOIC ACID PHENYLAMIDE

acesulfam K⇒6-METHYL-1,2,3-OXATHIAZIN-4(3*H*)-ONE 2,2-DIOXIDE, POTASSIUM SALT

acetaldehyde⇒ETHANAL

acetaldehyde diethyl acetal⇒1,1-DIETHYOETHANE

acetylphenylthiourea⇒1-(2,2-DIETHOXYETHYL)-3-PHENYL-2-THIOUREA

acetamide⇒ETHANAMIDE

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

Richet (1883)		90
Bailey (1887)	r	940
Corin (1888)	d	350
Kahlenberg (1898)		600
Becker & Herzog (1907)	d	6
Crozier (1916)		300
Gibson & Hartman (1919)	d	96.8
Liljestrand (1922)		60
Paul (1922,1923)		132
Schellworth (1922)	r	94
Rosenbaum (1925)		150
Berlatzky & Guevara (1928)	r	750
Taylor (1928); Taylor <i>et al.</i> (1930)	r	168 (sour taste, nose closed)
Hahn (1932, 1934); Hahn & Günther (1932); Petri (1935); Hahn <i>et al.</i> (1938, 1940)	r	17.8 - 207 ('Geschmackslupe', sour taste)
Cragg (1937)	r	6
Meinhold (1935)	r	48 - 66
Fabian & Blum (1943)	d	50
Fabian & Blum (1943)	r	120
Hara (1955)		3,000 - 30,000
Pangborn (1963)	d	1.2
Rothe (1963a)	d	200 - 300
Patton (1964)		54
Korslund & Eppright (1967)		120 - 600
Siek <i>et al.</i> (1969,1971)		22
Jefferson & Erdman (1970)	r	73
Rothe <i>et al.</i> (1972)	d	50
Shibamoto <i>et al.</i> (1980)		8
Rottmann (1985)	r	102
Schiffman (1993)	d	6.4 - 16.4
González-Viñas <i>et al.</i> (1996)	d	201
Warmke <i>et al.</i> (1996)	r	54 (pH 5.6)
Sato <i>et al.</i> (1997)	r	1,800 - 12,000 (filter paper disk)
Schieberle & Hofmann (1997)		60
Stevens (1997)	d	6.4 - 6.8
Schlichtherle-Cerny & Grosch (1998)	r	120 (pH 5.7)
Mojet <i>et al.</i> (2001)	d	14 - 29

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Darriet <i>et al.</i> (2002)	d	50
Weiss & Hofmann (2004); Rotzoll <i>et al.</i> (2006); Stark <i>et al.</i> (2006); Hufnagel & Hofmann (2008b)	r	120 (sour taste)
Kim <i>et al.</i> (2009)	d	900 (three-stimulus drop technique)
Kim <i>et al.</i> (2009)	r	5,500 (three-stimulus drop technique)
acetoin⇒3-HYDROXY-2-BUTANONE		
acetol⇒1-HYDROXYPROPANONE		
acetone⇒PROPANONE		
acetic acid⇒2-(HYDROXYMETHYL)PROPANOIC ACID		
acetosulfam⇒6-METHYL-1,2,3-OXATHIAZIN-4(3 <i>H</i> )-ONE 2,2-DIOXIDE, POTASSIUM SALT		
acetovanillon⇒1-(4-HYDROXY-3-METHOXYPHENYL)ETHANONE		
2-acetoxybenzoic acid⇒2-(ACETYLOXY)BENZOIC ACID		
1'-ACETOXYCHAVICOL ACETATE (galangal acetate)		
Yang & Eilerman (1999)	r	< 5
(Z,Z)-1-ACETOXY-2,4-DIHYDROXY-12,15-HENEICOSADIENE		
Degenhardt & Hofmann (2010)	r	0.092 mM (bitter taste)
1-ACETOXY-2,4-DIHYDROXY-16-HEPTADECENE		
Degenhardt & Hofmann (2010)	r	11.2 (bitter taste)
1-ACETOXY-2,4-DIHYDROXY-16-HEPTADECYNE		
Degenhardt & Hofmann (2010)	r	8.8 (bitter taste)
(Z)-3-acetoxyheptadeca-1,9-diene-4,6-diin-8-ol⇒FALCARINDIOL 3-ACETATE		
(Z,Z)-1-ACETOXY-2-HYDROXY-4-OXO-12,15-HENECOSADIENE		
Degenhardt & Hofmann (2010)	r	0.121 mM (bitter taste)
(Z,Z,Z)-1-ACETOXY-2-HYDROXY-4-OXO-5,12,15-HENEICOSATRIENE		
Degenhardt & Hofmann (2010)	r	0.070 mM (bitter taste)
1-ACETOXY-2-HYDROXY-4-OXOHEPTADECANE		
Degenhardt & Hofmann (2010)	r	0.313 mM (bitter taste)
1-ACETOXY-2-HYDROXY-4-OXO-16-HEPTADECENE		
Degenhardt & Hofmann (2010)	r	0.088 mM (bitter taste)
1-ACETOXY-2-HYDROXY-4-OXO-12-OCTADECENE		
Degenhardt & Hofmann (2010)	r	0.070 mM (bitter taste)
3-ACETOXY-1,2-PROPANEDIOL (glycerol monoacetate, monacetin) [106-61-6]		
Jugel (1979)	r	1,340 - 1,610 (bitter taste)
(S)-(-)-N-ACETYL-2-AMINO-3-(3-INDOLYL)PROPANOATE (N-acetyl-L-tryptophan) [1218-34-4]		
Wieser & Belitz (1975)	r	2,460 - 2,960 (bitter taste)
N-ACETYL-L-2-AMINO-3-METHYLBUTANOIC ACID (Ac-L-Val) [96-81-1]		
Tamura <i>et al.</i> (1990a)	r	150 (sour taste)
N-ACETYL-L-2-AMINO-3-METHYLPENTANOIC ACID (Ac-L-Ile) [3077-46-1]		
Tamura <i>et al.</i> (1990a)	r	163 (sour taste)
N-ACETYL-L-2-AMINO-4-METHYLPENTANOIC ACID (Ac-L-Leu) [1188-21-2]		
Asao <i>et al.</i> (1987)	r	3,080 (bitter taste)

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Tamura <i>et al.</i> (1990a)	r	81 (sour taste)
N-ACETYL-L-2-AMINO-3-PHENYLPROPANOIC ACID (N-acetyl-L-phenylalanine) [2018-61-3]		
Wieser & Belitz (1975)	r	2,070 - 2,490 (bitter taste)
Asao <i>et al.</i> (1987)	r	1,880 (bitter taste)
2-(N-ACETYLAMINO)-5-AMINOPENTANOIC ACID (H-L-Orn(Ac)-OH)		
Seki <i>et al.</i> (1990)	r	2.54 mM (sweet taste)
5-(N-ACETYLAMINO)-2-AMINOPENTANOIC ACID ( $\delta$ -Ac-L-Orn)		
Seki <i>et al.</i> (1990)	r	1.91 mM (sweet taste)
5-ACETYL-2,3-DIHYDRO-1,4-THIAZINE [164524-93-0]		
Hofmann & Schieberle (1995); Hofmann <i>et al.</i> (1995)		0.000 6
2-ACETYLFURAN (2-furyl methyl ketone) [1192-62-7]		
Brulé <i>et al.</i> (1971)	d	80
Shibamoto <i>et al.</i> (1980)		1
1-ACETYLMIDAZOLE [2466-76-4]		
Jugel (1979)	r	880 - 1,320 (bitter taste)
N-acetyl-L-isoleucine methyl ester $\Rightarrow$ METHYL L-N-ACETYL-2-AMINO-3-METHYLPENTANOATE N-acetyl-L-leucine ethyl ester $\Rightarrow$ ETHYL L-N-ACETYL-2-AMINO-4-METHYLPENTANOATE N-acetyl-L-leucine methyl ester $\Rightarrow$ METHYL L-N-ACETYL-2-AMINO-4-METHYLPENTANOATE		
1-ACETYL-4-METHYLBENZENE (methyl acetophenone) [122-00-9]		
Masanetz (1997)		0.0156
2-ACETYL-4-METHYLTHIAZOLE [7533-07-5]		
Schutte (1974)		0.300
2-(ACETYLOXY)BENZOIC ACID (2-acetoxybenzoic acid, <i>n</i> -acetylsalicylic acid, aspirin) [50-78-2]		
Hahn (1932)		523 ('Geschmackslupe')
Blakeslee & Salmon (1935)		200
Jugel (1979)	r	> 9,010 (bitter taste)
1-(acetyloxy)-1,2-dihydroobacunoic acid $\epsilon$ -lactone $\Rightarrow$ NOMILIN N-acetyl-L-phenylalanine $\Rightarrow$ N-ACETYL-L-2-AMINO-3-PHENYLPROPANOIC ACID N-acetyl-D-phenylalanine ethyl ester $\Rightarrow$ ETHYL D-N-ACETYL-2-AMINO-3-PHENYLPROPANOATE N-acetyl-L-phenylalanine ethyl ester $\Rightarrow$ ETHYL L-N-ACETYL-2-AMINO-3-PHENYLPROPANOATE N-acetyl-D-phenylalanine methyl ester $\Rightarrow$ METHYL D-N-ACETYL-2-AMINO-3-PHENYLPROPANOATE		
ACETYLPYRAZINE [22047-25-2]		
Lawrence (1984-87)		0.1
Stempfl <i>et al.</i> (1985)	r	98 - 183 (bitter taste)
2-ACETYLPYRROLE [1072-83-9]		
Lawrence (1984-87)		100
1-ACETYL-2-(1-PYRROLIDINYL)FURAN		
Pabst <i>et al.</i> (1985)	r	179 - 251
<i>n</i> -acetylsalicylic acid $\Rightarrow$ 2-(ACETYLOXY)BENZOIC ACID		
2-ACETYLTHIAZOLE [24295-03-2]		
Schutte (1974)		0.010

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**2-ACETYL-2-THIAZOLINE** [29926-41-8]

Schutte (1974)		0.003
Cerny & Grosch (1993)		0.001

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

Golovnja & Rothe (1980)	d	0.000 08
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**1-ACETYL-2-THIOUREA** (N-acetylthiourea) [591-08-2]

Harris & Kalmus (1949b)		11
Chen (1979)	r	4.7 - 8.3 (bitter taste)

N-acetylthiourea⇒1-ACETYL-2-THIOUREA

N-acetyl-L-tryptophan⇒(S)-(-)-N-ACETYL-2-AMINO-3-(3-INDOLYL)PROPANOATE

N-acetyl-L-tryptophan ethyl ester⇒ETHYL (S)-(-)-N-ACETYL-2-AMINO-3-(3-INDOLYL)PROPANOATE

N-acetyl-L-tyrosine ethyl ester⇒ETHYL (S)-(-)-N-ACETYL-2-AMINO-3-(4-HYDROXYPHENYL)PROPANOATE

Ac-L-Ile⇒N-ACETYL-L-2-AMINO-3-METHYLPENTANOIC ACID

Ac-L-Leu⇒N-ACETYL-L-2-AMINO-4-METHYLPENTANOIC ACID

(E)-aconitic acid⇒(E)-PROPENE-1,2,3-TRICARBOXYLIX ACID

(Z)-aconitic acid⇒(Z)-PROPENE-1,2,3-TRICARBOXYLIX ACID

**ACONITINE** ((1 $\alpha$ ,6 $\alpha$ ,14 $\alpha$ ,15 $\alpha$ ,16 $\beta$ )-2,3-didehydro-20-ethyl-1,6,16-trimethoxy-4-(methoxymethyl)aconitane-8,13,14,15-tetrol 8-acetate 14-benzoate) [302-27-2]

Gley & Richet (1885a)		50
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 $\epsilon$ -Acp-OMe.HCl⇒METHYL 6-AMINOHEXANOATE HYDROCHLORIDE $\delta$ -Ac-L-Orn⇒5-(N-ACETYLAMINO)-2-AMINOPENTANOIC ACID

active amyl alcohol⇒2-METHYL-1-BUTANOL

**ACUTISSIMIN A** [108906-66-7]

Stark <i>et al.</i> (2010)	r	1.1 (astringency)
Stark <i>et al.</i> (2010)	r	> 120 (bitterness)

**ACUTISSIMIN B**

Stark <i>et al.</i> (2010)	r	1.9 (astringency)
Stark <i>et al.</i> (2010)	r	> 120 (bitterness)

Ac-L-Val⇒N-ACETYL-L-2-AMINO-3-METHYLBUTANOIC ACID

**N-(1-ADAMANTYL)UREA** [13072-69-0]

Jugel (1979)	r	> 1,940 (bitter taste)
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adenine⇒6-AMINO-1H-PURINE

**ADENOSINE** [58-61-7]

Jugel (1979)	r	800 - 1,600 (bitter taste)
Dunkel & Hofmann (2009); Sonntag <i>et al.</i> (2010)	r	20,580 (bitter taste)

**ADENOSINE 3',5'-CYCLIC MONOPHOSPHATE** (3',5'-cAMP) [60-92-4]

Dunkel & Hofmann (2009)	r	32,900 (umami taste)
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**ADENOSINE 5'-MONOPHOSPHATE SODIUM SALT** (sodium adenosine 5'-monophosphate) [13474-03-8]

Gutzeit-Walz & Solms (1971)	d	100
Warendorf <i>et al.</i> (1992); Rotzoll <i>et al.</i> (2006); Dunkel & Hofmann (2009)	r	740 - 2,220/1,480 (umami taste)

adipic acid⇒HEXANEDIOIC ACID

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**ADONITOL (ribitol) [488-81-3]**

Haefeli (1983)	r	13,690
Hufnagel & Hofmann (2008b)	r	6,890 (sweet taste)

H-β-Ala-NH-cyclohexyl⇒3-AMINOPROPANOIC ACID CYCLOHEXYLAMIDE

β-Ala-OMe.HCl⇒METHYL 3-AMINOPROPANOATE HYDROCHLORIDE

DL-alanine⇒DL-2-AMINOPROPANOIC ACID

D-alanine⇒(R)-(-)-2-AMINOPROPANOIC ACID

L-alanine⇒(S)-(+)-2-AMINOPROPANOIC ACID

β-alanine⇒3-AMINOPROPANOIC ACID

L-alanine *tert*-butyl ester HCl⇒*tert*-BUTYL L-2-AMINOPROPANOATE HYDROCHLORIDE

β-alanine methyl ester hydrochloride⇒METHYL 3-AMINOPROPANOATE HYDROCHLORIDE

H-β-Ala-NH-phenyl⇒3-AMINOPROPANOIC ACID PHENYLAMIDE

**3-O-(L-ALANYL)-D-GLUCOSE**

Tamura <i>et al.</i> (1985b)	r	2.3 mM (sweet taste)
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N-β-alanyl-L-histidine⇒L-CARNOSINE

aldehyde C14⇒TETRADECANAL

alliin⇒(S)-3-(2-PROPENYLSULPHINYL)-L-ALANINE

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

Chatonnet <i>et al.</i> (1992a)	d	1.2
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D-C-allylglycine⇒(R)-(+)-2-AMINO-4-PENTONOIC ACID

**1-ALLYL-4-METHOXYBENZENE (estragole, methylchavicol) [140-67-0]**

Murgoci (1996)		0.0075
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**5-ALLYL-1-METHOXY-2,3-METHYLENEDIOXYBENZENE (myristicin) [607-91-0]**

Blank <i>et al.</i> (1992)		0.03
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**4-ALLYL-2-METHOXYPHENOL (eugenol) [97-53-0]**

Stevens (1970)	d	0.090
Boidron <i>et al.</i> (1988); Chatonnet <i>et al.</i> (1992a)	d	0.007
Guth (1996)		0.001

**1-ALLYLOXY-2-AMINO-4-NITROBENZENE**

Verkade <i>et al.</i> (1946)	r	< 5 (sweet taste)
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**1-ALLYL-2-THIOUREA (thiosinamine) [109-57-9]**

Barnicot <i>et al.</i> (1951)	d	23.4 - 46.9
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**1-ALLYLUREA [557-11-9]**

Fischer (1967)		67 - 300
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**ALOIN [8015-61-0]**

Bailey & Franklin (1885)	r	4.8 (bitter taste)
Scholl & Munch (1937)	r	7.5 (bitter taste)

**ALUMINUM CHLORATE [15477-33-5]**

Grönberg (1919)		1,890 (astringent taste)
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**ALUMINUM CHLORIDE [7446-70-0, 7784-13-6]**

Renqvist (1919)	d	60
Böröcz-Szabó (1985)		50 mg Al/kg

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

Stooff (1919)	r	25
Böröcz-Szabó (1985)		<b>20 mg Al/kg</b>
Young <i>et al.</i> (1996)		7.4

**AMAROGENTIN** [21018-84-8]

Korte (1955); Korte & Schicke (1956)	r	0.017
Inouye <i>et al.</i> (1970); Inouye & Nakamura (1971)	r	< 1

**AMERICANIN A**

Schwarz & Hofmann (2009)	r	<b>0.004 mM</b> (velvety mouth-coating sensation)
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**AMAROSWERIN** [21233-18-1]

Inouye <i>et al.</i> (1970); Inouye & Nakamura (1971)	r	< 1
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**AMINOACETIC ACID** (glycine, glycocoll) [56-40-6]

Hahn (1934); Petri (1935); Hahn <i>et al.</i> (1938); Hahn & Ulbrich (1948)	r	3.9 - 35,670 ('Geschmackslupe', sweet taste)
Yoshida <i>et al.</i> (1966)	d	1,300
Nofre <i>et al.</i> (1974)	d	2,160
Wieser <i>et al.</i> (1977); Weiss & Hofmann (2004); Rotzoll <i>et al.</i> (2005, 2006); Scharbert & Hofmann (2005); Stark <i>et al.</i> (2006); Hufnagel & Hofmann (2008b); Dunkel & Hofmann (2009)	r	1,880 - 2,630 (sweet taste)
Schiffman <i>et al.</i> (1979); Schiffman (1993)	d	2,320 - 4,630
Haefeli & Glaser (1990)	r	1,160
Tamura <i>et al.</i> (1990b)	r	2,850 (sweet taste)

**2-AMINOACETIC ACID CYCLOHEXYLAMIDE** (H-gly-NH-cyclohexyl)

Ishibashi <i>et al.</i> (1988c); Tamura <i>et al.</i> (1989c)	r	<b>8.4 mM</b> (bitter taste)
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**2-AMINOACETIC ACID PHENYLAMIDE** (H-gly-NH-phenyl)

Ishibashi <i>et al.</i> (1988c); Tamura <i>et al.</i> (1989c)	r	<b>8.4 mM</b> (bitter taste)
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aminobenzene⇒ANILINE

**2-AMINO BENZOIC ACID** (anthranilic acid) [118-92-3]

Belitz <i>et al.</i> (1979,1988)	r	411 - 686 (sweet taste)
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**3-AMINO BENZOIC ACID** [99-05-8]

Belitz <i>et al.</i> (1979)	r	1,100 - 1,370 (sweet taste)
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**4-AMINO BENZOIC ACID** [150-13-0]

Belitz <i>et al.</i> (1979)	r	> 13,700 (sweet taste)
Belitz <i>et al.</i> (1979); Jugel (1979)	r	4,110 - 5,480 (bitter taste)

*m*-aminobenzonitrile⇒1-AMINO-3-CYANOBENZENE**AMINO-N-BENZOYLACETIC ACID** (hippuric acid, N-benzoylglycine) [495-69-2]

Wieser & Belitz (1975)	r	717 - 1,075 (bitter taste)
Shinoda & Okai (1985); Ishibashi <i>et al.</i> (1988c); Tamura <i>et al.</i> (1989c)	r	540 (sour taste)

**L-6-AMINO-2-(N-BENZOYLAMINO)HEXANOIC ACID** (Bz-L-Lys-OH) [366-74-5]