AIR detection (d) and recogniton (r) odour threshold values in mg/m^3

A

abhexone⇒5-ETHYL-3-HYDROXY-4-METHYL-2(5*H*)-FURANONE
acetaldehyde⇒ETHANAL
acetamide⇒ETHANAMIDE

ACETANILIDE *[103-84-4]*

Laffort (1968a)		270

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

Passy (1893b,1893c)	d	5 - 10
Grijns (1906)		49 - 76
Backman (1917)	r	4.8 - 5.0
Grijns (1919)		2
Mitsumoto (1926)	r	0.074 - 0.57
Hesse (1926)	r	0.6
Henning (1927)	d	3.6
Morimura (1934)	r	1.82 - 1.91
Jung (1936)	d	0.025
Jung (1936)	r	0.05
Balavoine (1943,1948)		300 - 500
Stone (1963c)	d	3.9
Stone & Bosley (1965)	d	4.2
Endo *et al.* (1967)		6.5
Takhirov (1969,1974)		0.60
Leonardos *et al.* (1969)	r	2.5
Homans *et al.* (1978)		0.37
Nauš (1982)	d	0.5
Nauš (1982)	r	25
Punter (1983)	d	0.09
Homans (1984)		0.93
Walker *et al.* (1990)		5.0
Nagy (1991)	d	0.37
Blank & Schieberle (1993)		0.03 - 0.09
Walker *et al.* (1996)		0.25 - 2.5
Cometto-Muñiz *et al.* (1998a);		
Cometto-Muñiz (1999)	d	0.025
Nagata (2003)	d	0.015
Van Thriel *et al.* (2006)	d	1.45
Wise *et al.* (2007); Miyazawa *et al.* (2009a)	d	0.017 - 0.020
Miyazawa *et al.* (2009b)	d	0.001
Cain *et al.* (2010)	d	0.15
Cometto-Muñiz & Abraham (2010b)	d	0.013

ACETIC ANHYDRIDE *[108-24-7]*

Takhirov (1969)		0.49
Hellman & Small (1973,1974)	d	< 0.6
Hellman & Small (1973,1974)	r	1.5

acetone⇒PROPANONE
acetonitrile⇒METHYL CYANIDE

ACETOPHENONE *[98-86-2]*

Imasheva (1963)		0.01
Tkach (1965)		0.01

AIR detection (d) and recogniton (r) odour threshold values in mg/m^3

Korneev (1965)		0.01
Gavaudan & Poussel (1966)		0.23
Hellman & Small (1973,1974)	d	1.5
Hellman & Small (1973,1974)	r	2.9
Sävenhed *et al.* (1985)	d	0.01 - 0.04
Randebrock (1986)		0.0012

acetyl chloride⇒ETHANOYL CHLORIDE

ACETYLDI-*tert*-BUTYL(METHYL)SILANE
Sunderkötter *et al.* (2010) > 0.5

ACETYLDICYCLOPROPYL(ETHYL)SILANE
Sunderkötter *et al.* (2010) 0.025

ACETYLDICYCLOPROPYL(METHYL)SILANE
Sunderkötter *et al.* (2010) 0.058

2-acetyl-3,4-dihydro-2*H*-azole⇒2-ACETYL-1-PYRROLINE

5-ACETYL-2,3-DIHYDRO-1,4-THIAZINE *[164524-93-0]*
Hofmann & Schieberle (1995,1997);
Hofmann *et al.* (1995) 0.000 02 - 0.000 08

2-ACETYL-5,6-DIHYDRO-4*H*-1,3-THIAZINE
Fuganti *et al.* (2007) 0.000 000 54

ACETYLDIISOPROPYL(METHYL)SILANE
Sunderkötter *et al.* (2010) 0.088

(-)-(9*R*,10*S*)-10-ACETYL-9,10-DIMETHYLBICYCLO[6.4.0]DODEC-1(8)-ENE
Kraft & Gallo (2004) 0.000 19

acetylene⇒ETHYNE
acetylene tetrabromide⇒ 1,1,2,2-TETRABROMOETHANE

7-ACETYL-1,1,3,4,4,6-HEXAMETHYL-1,2,3,4-TETRAHYDRONAPHTHALENE (fixolide, tonalide) *[1506-02-1]*

McGee *et al.* (1995)	d	0.000 5 - 0.005
Traynor (2001)		0.222

1-ACETYL-4-METHYLBENZENE (*p*-methyl acetophenone) *[122-00-9]*

Appell (1969)	0.000 15
Schieberle *et al.* (1988); Schieberle & Grosch (1988)	0.002 - 0.0108
Blank *et al.* (1989)	0.002 - 0.003

(±)-3α-ACETYL-2,3,4,4αβ,5,6,7,8-OCTAHYDRO-3β,4β,5,5-TETRAMETHYLNAPHTHALENE
Etzweiler *et al.* (1992) 0.5

ACETYLPYRAZINE *[22047-25-2]*
Hofmann *et al.* (1995);
Hofmann & Schieberle (1997) 0.000 4

2-ACETYLPYRROLE *[1072-83-9]*
Hofmann & Schieberle (1997) > 2

AIR detection (d) and recogniton (r) odour threshold values in mg/m^3

2-ACETYL-1-PYRROLINE (2-acetyl-3,4-dihydro-2*H*-azole) *[85213-22-5]*

Blank *et al.* (1989); Schieberle (1990,1991); Schieberle & Grosch (1991,1994); Hofmann *et al.* (1995); Hofmann & Schieberle (1997)		0.000 02 - 0.000 04

6-ACETYL-1,2,3,4/2,3,4,5-TETRAHYDROPYRIDINE

Schieberle (1990); Schieberle & Grosch (1991); Hofmann *et al.* (1995); Hofmann & Schieberle (1997)		0.000 06

2-ACETYL-2,3,8,8-TETRAMETHYL-1,2,3,4,5,6,7,8-OCTAHYDRONAPHTHALENE (cyclemone) *[68991-97-9]*

Neuner-Jehle & Etzweiler (1991)		0.000 003

2-ACETYLTHIAZOLE *[24295-03-2]*

Hofmann *et al.* (1995); Hofmann & Schieberle (1997)		0.004 - 0.0041

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

Hofmann & Schieberle (1995,1997);		
Hofmann *et al.* (1995)		0.000 02 - 0.000 08
Cerny (1998)		0.000 016 – 0.000 022

acrolein⇒2-PROPENAL
acrylic acid⇒PROPENOIC ACID
acrylonitrile⇒ETHENYL CYANIDE
active amyl acetate⇒2-METHYLBUTYL ACETATE
active amyl alcohol⇒2-METHYL-1-BUTANOL
1-adamantanaldehyde⇒TRICYCLO[3.3.1.1(3.7)]DECANE-1-CARBOXALDEHYDE
adamsite⇒10-CHLORO-5,10-DIHYDROPHENARSAZINE
aldehyde C16⇒ETHYL 3-METHYL-3-PHENYL-2,3-EPOXYPROPANOATE
allyl alcohol⇒2-PROPEN-1-OL
allylamine⇒2-PROPENYLAMINE

7-ALLYLBENZO[*b*][1,4]DIOXEPIN-3-ONE

Kraft & Eichenberger (2003)		0.000 051

allyl caproate⇒2-PROPENYL HEXANOATE
allyl chloride⇒3-CHLOROPROPENE

1-ALLYL-2,5-DIMETHOXY-3,4-METHYLENEDIOXYBENZENE (apiole) *[523-80-8]*

Tempelaar (1913); Zwaardemaker (1927)	d	610

allyl isocyanide⇒2-PROPENYL ISOCYANIDE
allyl mercaptan⇒2-PROPENE-1-THIOL

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

Williams *et al.* (1977)	d	0.000 13

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

Blank & Grosch (1991a)		0.0015

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

Tempelaar (1913); Zwaardemaker (1927)	d	0.2 - 0.23
Ohma (1922)	d	0.23
Van Anrooij (1931)	d	0.2
Baldus (1936)	d	0.005 - 0.0055
Baldus (1936)	r	0.007 - 0.01
Jones (1955c)	r	3.8

AIR detection (d) and recogniton (r) odour threshold values in mg/m^3

Appell (1969)		0.000 008
Huber (1984)		0.000 076
Randebrock (1986)		0.000 022
De Wijk (1989)		0.11
Blank *et al.* (1989)		0.000 2 - 0.000 3
Ferreira *et al.* (1998)		0.000 61

4-ALLYL-1,2-(METHYLENEDIOXY)BENZENE (safrole) *[94-59-7]*

Tempelaar (1913); Zwaardemaker (1927)	d	0.1 - 2
Ohma (1922)	d	0.125
Van Anrooij (1931)	d	0.000 35
Baldus (1936)	d	0.005
Baldus (1936)	r	0.01
Jones (1955a)	r	0.08
Jones (1955b)	r	0.08 - 4.8
Jones (1955c)	r	3.0
Appell (1969)		0.000 07
Köster (1971)	d	16 - 30

allyl mustard oil⇒2-PROPENYL ISOTHIOCYANATE
ambretone⇒5-CYCLOHEXADECEN-1-ONE
ambrettolide⇒16-HYDROXY-7-HEXADECENOIC ACID LACTONE

2-AMINOETHANOL (ethanolamine) *[141-43-5]*

Weeks *et al.* (1960)	d	6.5
Weeks *et al.* (1960)	r	60

6-AMINOHEXANOIC ACID LACTAM (caprolactam) *[105-60-2]*

Krichevskaya (1968)	d	0.30

(*R*)-(+)-2-AMINO-3-MERCAPTOPROPANOIC ACID (L-cysteine) *[52-90-4]*

Laska (2010)	d	0.0045

(*S*)-(-)-2-AMINO-3-MERCAPTOPROPANOIC ACID (D-cysteine) *[921-01-7]*

Laska (2010)	d	0.0048

(*R*)-(-)-2-AMINO-4-(METHYLTHIO)BUTANOIC ACID (D-methionine) *[348-67-4]*

Laska (2010)	d	0.000 22

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

Laska (2010)	d	0.0018

1-AMINONAPHTHALENE (1-naphthylamine) *[134-32-7]*

Backman (1917)	r	0.14 - 0.29

2-AMINONAPHTHALENE (2-naphthylamine) *[91-59-8]*

Backman (1917)	r	1.4 - 1.9

AMMONIA *[7664-41-7]*

Valentin (1848,1850)		21
Grijns (1906)		21.6 - 42
Fieldner *et al.* (1921)		37
Smolczyk & Cobler (1930)		0.71 - 7.1
Geier (1936)	d	1.25
Geier (1936)	r	2.5
Carpenter *et al.* (1948)		0.7
Smyth (1956)	r	< 0.7

AIR detection (d) and recogniton (r) odour threshold values in mg/m^3

Patty (1962a)		< 3.5
Saifutdinov (1966)		0.50 - 0.55
Endo *et al.* (1967)		37
Leonardos *et al.* (1969)	r	33
Hamanabe *et al.* (1969)		0.03
Stephens (1971)		2.7
Nishida *et al.* (1975)	d	1.8 - 37.8
Hill & Barth (1976)		21
Schoedder (1977)		5.0 - 7.6
Logtenberg (1978)	d	5.2
Nishida *et al.* (1979)	d	11.6
Anon. (1980)	d	0.1
Anon. (1980)	r	0.4
Nauš (1982)	d	1.5
Nauš (1982)	r	35
Nagy (1991)	d	3.7
Nagata (2003)	d	1.1
Van Thriel *et al.* (2006)	d	0.04
Smeets *et al.* (2007)	d	1.8 (static olfactometry)
Smeets *et al.* (2007)	d	1.8 (dynamic olfactometry)

amyl acetate⇒PENTYL ACETATE
amyl alcohol⇒1-PENTANOL
tert-amyl alcohol⇒2-METHYL-2-BUTANOL
amyl butyrate⇒PENTYL BUTANOATE
amyl isovalerate⇒PENTYL 3-METHYLBUTANOATE
amyl mercaptan⇒1-PENTANETHIOL
tert-amyl mercaptan⇒2-METHYL-2-BUTANETHIOL
amyl propionate⇒ PENTYL PROPANOATE
amyl salicylate⇒PENTYL SALICYLATE

4,16-ANDROSTADIEN-3-ONE ((8*S*,9*S*,10*R*,13*R*,14*S*)-10,13-dimethyl-1,2,6,7,8,9,11,12,14,15-decahydrocyclopenta[a]phenanthren-3-one) *[4075-07-4]*

Kraft & Popaj (2004)	d	0.000 002

5α-ANDROST-16-EN-3α-OL *[1153-51-1]*

Bajgrowicz & Fráter (2000)		0.000 02
Kraft & Popaj (2004)	d	0.000 000 67

5α-ANDROST-16-EN-3β-OL *[7148-51-8]*

Kraft & Popaj (2004)	d	0.0053

5α-ANDROST-16-EN-3-ONE *[18339-16-7]*

Amoore (1977)	d	0.0021
Baydar *et al.* (1992a,1993)	d	0.000 000 868
Kraft & Popaj (2004)	d	0.000 000 4

anethole⇒1-METHOXY-4-(1-PROPENYL)BENZENE

ANILINE *[62-53-3]*

Tempelaar (1913)	d	0.97
Huijer (1917); Zwaardemaker (1927)	d	46
Backman (1917)	r	5.0 - 5.8
Geier (1936)	d	1.2 - 1.5
Geier (1936)	r	2.0 - 2.5
Jacobson *et al.* (1958)		38
Tkachev (1963)		0.37
Leonardos *et al.* (1969)	r	3.8

AIR detection (d) and recogniton (r) odour threshold values in mg/m^3

Öztürk (1976)	d	2.21
Nauš (1982)	d	2
Nauš (1982)	r	20

anisaldehyde⇒4-METHOXYBENZALDEHYDE
anisole⇒METHOXYBENZENE
apiole⇒1-ALLYL-2,5-DIMETHOXY-3,4-METHYLENEDIOXYBENZENE

ARSINE *[7784-42-1]*

Patty (1962b)		< 3.2

artificial musk⇒1-*tert*-BUTYL-3-METHYL-2,4,6-TRINITROBENZENE
azine⇒PYRIDINE
aziridine⇒ETHYLENEIMINE
azolidine⇒PYRROLIDINE

B

BENZALDEHYDE *[100-52-7]*

Backman (1917)	r	0.33 - 0.50
Rocén (1920)	r	1.7
Ohma (1922)	d	0.44
Katz & Talbert (1930)		0.18
Jones (1955c)	r	4.1
Pliška & Janiček (1965)		13
Knuth (1973)		0.27
Laing (1975)	d	4.3
Nishida *et al.* (1979)	d	3,400
Randebrock (1986)		0.014
Stevens & Cain (1987a)	d	0.43 - 43
Khiari *et al.* (1992)	d	< 0.01
Von Ranson & Belitz (1992b)	d	0.61
Von Ranson & Belitz (1992b)	r	2.1
McGee *et al.* (1995)	d	0.1 - 1
Yang *et al.* (2008)		0.085

BENZENE *[71-43-2]*

Backman (1917)	r	6.6 - 6.9
Backman (1918); Zwaardemaker (1927)		5 - 5.3
Grijns (1919); Zwaardemaker (1927)		420
Schley (1934)	d	8.8
Schley (1934)	r	12
Jones (1954)	r	480 - 510
Jones (1955c)	r	180
Novikov (1957)		4.9
Deadman & Prigg (1959)	d	9
Gusev (1965)		2.8 - 4
Nauš (1962)	d	6
May (1966)	d	180
May (1966)	r	310
Elfimova (1966)		2.5
Schutte & Zubek (1967)	r	310
Leonardos *et al.* (1969)	r	15
Alibaev (1970)		2.9
Dravnieks (1971)		38
Köster (1971)	d	37
Dravnieks & Laffort (1972)		32.5