

OTHER MEDIA

detection (d) and recognition (r) odour threshold values in mg/kg

A

acetal⇒1,1-DIETHOXYETHANE
acetaldehyde⇒ETHANAL

ACETIC ACID

Salo <i>et al.</i> (1972)	d	26.0	9.4 % (w/w) grain spirit
Yoshida (1972)	d	6.9	nujiol (a mineral oil)
Yoshida (1972)	r	100	nujiol (a mineral oil)
Yoshida (1984);Takagi (1989)	d	100	nujol
Yoshida (1984);Takagi (1989)	r	100	nujol
Williams & Ismail (1981)		35	sugar-acid base
Guth & Grosch (1994)		32.3	0.03 M Na phosphate; pH 5.7
Reiners & Grosch (1998)	d	0.124	refined sunflower oil
Stephan & Steinhart (1999)	r	0.75	refined vegetable oil
Lee <i>et al.</i> (2000)	d	24-28	3 year old grain whisky: 23 % ethanol
Lee <i>et al.</i> (2000)	r	102-233	3 year old grain whisky: 23 % ethanol

acetoin⇒3-HYDROXY-2-BUTANONE

acetone⇒PROPANONE

acetovanillon⇒1-(4-HYDROXY-3-METHOXYPHENYL)ETHANONE

4-ACETYL-6-tert-BUTYL-1,1-DIMETHYLINDANE (celestolide)

D'Andrea (1975)	d	500 - 510	diethyl phthalate
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2-acetyl-3,4-dihydro-2H-azole⇒2-ACETYL-1-PYRROLINE

ACETYLPIRAZINE

Schieberle (1993,1996)	d	0.01	sunflower oil
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2-ACETYL-1-PYRROLINE (2-acetyl-3,4-dihydro-2H-azole)

Schieberle (1993,1996)	d	0.000 1	sunflower oil
Rychlik & Grosch (1996)	d	0.000 0073	starch
Kubickova & Grosch (1998)		0.000 1	sunflower oil

6-ACETYL-TETRAHYDROPYRIDINE

Rychlik & Grosch (1996)	d	0.000 054	starch
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2-ACETYL-2-THIAZOLINE

Ong & Acree (1998)		0.000 5	artificial saliva and fruit juice matrix
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acrolein⇒2-PROPENAL

acrylic acid⇒PROPENOIC ACID

active amyl alcohol⇒2-METHYL-1-BUTANOL

adamantane⇒TRICYCLO[3.3.1.1(3.7)]DECANE

allyl caproate⇒2-PROPENYL HEXANOATE

4-ALLYL-2-METHOXYPHENOL (eugenol)

Proetz (1924)		0.53	liq. petrolatum
Rosenthal (1927)		88	diethyl phthalate
Swan & Burtles (1978); Swan <i>et al.</i> (1981)		0.05	20 % ethanol-water
Jounela-Eriksson & Lehtonen (1981)		0.011	10 vol. % grain spirit
Etiévant <i>et al.</i> (1983)		6.4	base white sweet wine
Ophir <i>et al.</i> (1986)	d	42-81	diethyl phthalate
Gross-Isseroff & Lancet (1988)	d	0.032-320	diethyl phthalate
Ophir <i>et al.</i> (1988)	d	10.5-33.3	diethyl phthalate
Gross-Isseroff <i>et al.</i> (1992)	d	10,000	diethyl phthalate

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Ferreira <i>et al.</i> (1998)		0.01	12 % v/v ethanol, 5 g/l tartaric acid, pH 3.5
Jagella & Grosch (1999b)	d	0.000 98	starch
Moyano <i>et al.</i> (2002)		0.01	14 % (v/v) ethanol; tartaric acid to pH 3.5

4-ALLYL-1,2-(METHYLENEDIOXY)BENZENE (safrole)

Rosenthal (1927)		177	diethyl phthalate
Kendall & Neilson (1964)		51	hexadecane
Kendall & Neilson (1964)		0.09	aqueous 0.1 % ethanol
Koelega & Köster (1974)		177-221	benzyl benzoate

ALLYL SULPHOCYANATE

Proetz (1924)		3.05	liq. petrolatum
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ambrettolid⇒16-HYDROXY-7-HEXADECENOIC ACID LACTONE

(R)-(+)-2-AMINO-3-MERCAPTOPROPANOIC ACID (L-cysteine)

Naim <i>et al.</i> (1997)		220	orange juice
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amyl acetate⇒PENTYL ACETATE

amyl alcohol⇒1-PENTANOL

amyl salicylate⇒PENTYL SALICYLATE

5,16-ANDROSTADIEN-3-β-OL

Brooks & Pearson (1989)	d	8.9	oil/water
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4,16-ANDROSTADIEN-3-ONE

Brooks & Pearson (1989)	d	7.8	oil/water
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5-α-ANDROST-16-EN-3-α-OL

Brooks & Pearson (1989)	d	0.9	oil/water
Morofushi <i>et al.</i> (2000)		3-30	mineral oil

5-α-ANDROST-16-EN-3-β-OL

Brooks & Pearson (1989)	d	1.2	oil/water
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5-α-ANDROST-16-EN-3-ONE

Pollack <i>et al.</i> (1982)		0.5 - 1	light mineral oil
Thomson (1984)		0.0013	aqueous ethanol
Wysocki & Beauchamp (1984)		62.5-125	mineral oil
Gross-Isseroff <i>et al.</i> (1987)	d	2.4->1,250	heavy mineral oil
Brooks & Pearson (1989)	d	0.6	oil/water
Dorries <i>et al.</i> (1989)		31 - 250	mineral oil
Wysocki <i>et al.</i> (1989)	d	125-2,000	light mineral oil
Hummel <i>et al.</i> (1991)	d	1.5-6.3	propylene glycol
Gross-Isseroff <i>et al.</i> (1992)	d	2.4->1,250	heavy mineral oil
Pierce <i>et al.</i> (1993)	r	1.95	light mineral oil
Sather (1995)		1.9	sunflower oil
Annor-Frempong <i>et al.</i> (1997)	d	0.152	sunflower oil and vegetable oil
Font I Furnols <i>et al.</i> (2000)	d	0.10	refined sunflower oil
Morofushi <i>et al.</i> (2000)		13-63	mineral oil

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

anisaldehyde⇒4-METHOXYBENZALDEHYDE

B

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BENZALDEHYDE

Proetz (1924)		0.33	liq. petrolatum
Rosenthal (1927)		44	diethyl phthalate
Moncrieff (1957)		500	propylene glycol
Williams & Ismail (1981)		0.19	sugar-acid base
Delfini (1987)		3 - 3.5	white wine
Gross-Isseroff & Lancet (1988)	d	0.000	1-1,000 diethyl phthalate
Gross-Isseroff & Lancet (1988)	d	1,550	diethyl phthalate

BENZYL ACETATE

Rosenthal (1927)		88	diethyl phthalate
Williams & Ismail (1981)		0.3	sugar-acid base

benzyl alcohol⇒ α -HYDROXYTOLUENE

benzylbenzene⇒DIPHENYLMETHANE

BENZYL BENZOATE

Rosenthal (1927)		885	diethyl phthalate
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BENZYL FORMATE

Rosenthal (1927)		177	diethyl phthalate
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BIS(METHYLTHIO)METHANE (2,4-dithiapentane)

Adda <i>et al.</i> (1978); Cuer <i>et al.</i> (1979)	d	0.060	liquid cheese
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borneol⇒endo-1,7,7-TRIMETHYLBICYCLO[2.2.1]-2-HEPTANOL

bornyl acetate⇒endo-1,7,7-TRIMETHYLBICYCLO[2.2.1]-2-HEPTYL ACETATE

bromoform⇒TRIBROMOMETHANE

1-BROMONAPHTHALENE

Dhont <i>et al.</i> (1972)	d	0.25	'liquid sugar'
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2-BROMOPHENOL

Bemelmans & Den Braber (1983)	d	0.018	peanut oil
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3-BROMOPHENOL

Bemelmans & Den Braber (1983)	d	18	peanut oil
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4-BROMOPHENOL

Bemelmans & Den Braber (1983)	d	27	peanut oil
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BUTANAL (butyraldehyde)

Meijboom (1964)		0.15	paraffin oil
Salo <i>et al.</i> (1972)	d	0.028	9.4 % (w/w) grain spirit

2,3-BUTANEDIONE (diacetyl)

Van Niel <i>et al.</i> (1929)		>2 - 4	butter
Sega <i>et al.</i> (1967)	d	0.162	lager beer
Salo (1970a); Salo <i>et al.</i> (1972)	d	0.0025-0.020	9.4 % (w/w) grain spirit
Selfridge & Amerine (1978)	d	0.05	artificial wine
Koch <i>et al.</i> (1978)		0.2 - 0.3	apple wine
Herrmann & Abd El Salam (1980b)		0.003	sunflower oil
Rothe (1991)		0.4	neutral margarine mass
Schieberle <i>et al.</i> (1993)		0.0045	sunflower oil
Preininger & Grosch (1994)		0.010	sunflower oil
Rychlik & Grosch (1996)	d	0.0065	starch

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Kubickova & Grosch (1998)		0.01	sunflower oil
Lee <i>et al.</i> (2000)	d	0.002-0.02	3 year old grain whisky: 23 % ethanol
Lee <i>et al.</i> (2000)	r	0.006-0.04	3 year old grain whisky: 23 % ethanol
Rogerson <i>et al.</i> (2001)	r (buttery)	0.0195	20 % ethanol, tartaric acid 5g/l, pH 3.5
Rogerson <i>et al.</i> (2001)	r (caramel)	1.25	20 % ethanol, tartaric acid 5g/l, pH 3.5
BUTANOIC ACID (butyric acid)			
Salo (1970a,1970b); Salo <i>et al.</i> (1972)	d	3.4/4	9.4 % (w/w) grain spirit
Baldwin <i>et al.</i> (1973)	r	0.3	buffered solution pH 3.2
Baldwin <i>et al.</i> (1973)	r	0.9	buffered solution pH 4.5
Baldwin <i>et al.</i> (1973)	r	4.8	buffered solution pH 6.0
Amoore & Buttery (1978)	d	0.109	safflower oil
Haslbeck <i>et al.</i> (1986)		44 - 56	cream
Haslbeck <i>et al.</i> (1986)		17 - 49	30 % coconut oil
Haslbeck <i>et al.</i> (1986)		53 - 210	38 % coconut oil aromatized
Schieberle <i>et al.</i> (1993)		0.135	sunflower oil
Guth & Grosch (1994)		2.73	0.03 M Na phosphate; pH 5.7
Rychlik & Grosch (1996)	d	0.1	starch
Stephan & Steinhart (1999)	r	0.205	refined vegetable oil
Moyano <i>et al.</i> (2002)		2.5	14 % (v/v) ethanol; tartaric acid to pH 3.5
1-BUTANOL (butyl alcohol)			
Furchtgott & Friedman (1960)		3,112-4,076	mineral oil
Kimbrell & Furchtgott (1963)	d	1,000-60,000	mineral oil
Cain (1966)	r	2,380	diethyl phthalate
Semb (1968)		100-5,000	diethyl phthalate
Salo <i>et al.</i> (1972)	d	>5.0	9.4 % (w/w) grain spirit
Granzer <i>et al.</i> (1986)		10 - 200	coconut oil
Moyano <i>et al.</i> (2002)		160	14 % (v/v) ethanol; tartaric acid to pH 3.5
2-BUTANOL (<i>sec</i>-butyl alcohol)			
Salo <i>et al.</i> (1972)	d	>10.0	9.4 % (w/w) grain spirit
Moyano <i>et al.</i> (2002)		50	14 % (v/v) ethanol; tartaric acid to pH 3.5
BUTANONE (methyl ethyl ketone)			
Forrai <i>et al.</i> (1970)	<i>trimodal distribution</i> r	2.4-156	silicone oil
Doty (1975)	d	98	propylene glycol
Granzer <i>et al.</i> (1986)		10-100	coconut oil
Granzer <i>et al.</i> (1986)		100-1,000	liquid cheese
Granzer <i>et al.</i> (1986)		5-100	biscuits
Granzer <i>et al.</i> (1986)		100-500	marmelade
Rüter (1992)	d	24	potato crisps
Rüter (1992)	r	110	potato crisps
Rüter (1992)	d	86	coffee powder
Rüter (1992)	r	440	coffee powder
Rüter (1992)	d	32	'Gummibären'
Rüter (1992)	r	70	'Gummibären'
Rüter (1992)	d	44	milk chocolate
Rüter (1992)	r	90	milk chocolate
3-BUTEN-2-ONE (methyl vinyl ketone)			
Evans <i>et al.</i> (1971)	d	0.2	cottonseed oil
BUTYL ACETATE			
Moncrieff (1957)		300	propylene glycol
Sega <i>et al.</i> (1967)	d	2.63	lager beer
De Wet (1978)	d	1.83	wine residue medium