

# Order: Sniffing Sticks and Training Sets

<http://www.chm.tu-dresden.de/lc2/index-die.shtml>



TECHNISCHE  
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DRESDEN

Company	<input type="text"/>
Name	<input type="text"/>
Delivery address	<input type="text"/>
Order number	<input type="text"/>
E-Mail for delivery of invoice	<input type="text"/>

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## Materials for Food Contact Materials

Set-Offer (15 odours/ taints)	Quantity
<b>Flavours:</b> : Acetophenone, 1,3-Dimethyl naphthalene, Ethyl acetate, Ethyl acrylate, 2-Ethylhexanol, Hexanal, Isophorone, cold seal adhesive/ latex, oxidized linseed oil, 4-Methyl benzaldehyde, Mineral oil, oxidized PE, Styrene, Toluene, 2,4,6-Trichlorophenol	<input type="text"/>
<b>Poster with 12 sniffing sticks</b> Labelled with names of substances, poster coloured, laminated and light resistant in German Language (without 2-Ethylhexanol, Toluene, 1,3-Dimethyl naphthalene) Price: 150 Euro plus VAT & shipping costs*	<input type="text"/>
<b>Poster with 25 sniffing sticks</b> Labelled with names of substances, poster coloured, laminated and light resistant in English Language (without: 2-Ethylhexanol, Isophorone, Oxidized linseed oil, Toluene additionally: Benzophenone, 2-Butanone, Butyric acid, E,E-2,4-Decadienal, 2-Ethyl-5,5'-dimethyl-1,3-dioxan (2-EDD), 4-Methylphenol, E-2-Nonenal, oxidized PA-6,6, oxidized PP, 4-Phenyl-1-cyclohexene, 4-Propyl benzaldehyde, Sotolone, Trichloroanisol, Vanillin) Price: 320 Euro plus VAT & shipping costs*	<input type="text"/>
<b>Training set with 15 aroma solutions and odour strips</b> Storage box with 15 x 2,5 ml vials, labelled with random codes, DIN A4 paper with assignment, block with 80 odour strips Price: 125 Euro plus VAT & shipping costs*	<input type="text"/>
<b>Training set with 15 sniffing sticks</b> Labelled with (please select) <input type="checkbox"/> Substances <input type="checkbox"/> Code** Price: 110 Euro plus VAT & shipping costs*	<input type="text"/>

<p><b>Sniffing sticks for ranking test of intensity scale according to standard EN 1230 and DIN 10955 (2-Methylnaphthaline)</b></p> <p>Labelled with random codes  Set with 7 sniffing sticks: 1 solvent reference, 5 sniffing sticks of intensity '0' to '4' and one stick of higher intensity (for less sensitive examiner)</p> <p>Price: 50 Euro plus VAT &amp; shipping costs*</p> <input type="checkbox"/> Sniffing sticks shall be shipped in a vacuum packaging, 1,00€ per stick	<input type="checkbox"/>
<p><b>Sniffing sticks for ranking test of intensity scale with n-Butanol</b></p> <p>Labelled with random codes  Set with 7 sniffing sticks: 1 solvent reference, 5 sniffing sticks of intensity '0' to '4' and one stick of higher intensity (for less sensitive examiner)</p> <p>Price: 50 Euro plus VAT &amp; shipping costs*</p> <input type="checkbox"/> Sniffing sticks shall be shipped in a vacuum packaging, 1,00€ per stick	<input type="checkbox"/>
<p><b>Sniffing sticks for ranking test of intensity scale with 3-Methyl butyric acid (Isovaleric acid)</b></p> <p>Labelled with random codes  Set with 7 sniffing sticks: 1 solvent reference, 5 sniffing sticks of intensity '0' to '4' and one stick of higher intensity (for less sensitive examiner)</p> <p>Price: 50 Euro plus VAT &amp; shipping costs*</p> <input type="checkbox"/> Sniffing sticks shall be shipped in a vacuum packaging, 1,00€ per stick High individual variance of sensitivity.	<input type="checkbox"/>
<p><b>Sniffing sticks for ranking test of intensity scale with oxidized polypropylene</b></p> <p>Labelled with random codes  Set with 7 sniffing sticks: 1 solvent reference, 5 sniffing sticks of intensity '0' to '4' and one stick of higher intensity (for less sensitive examiner)</p> <p>Price: 80 Euro plus VAT &amp; shipping costs*</p> <input type="checkbox"/> Sniffing sticks shall be shipped in a vacuum packaging, 1,00€ per stick	<input type="checkbox"/>
<p><b>Sniffing sticks for ranking test of intensity scale with oxidized polyethylene</b></p> <p>Labelled with random codes  Set with 7 sniffing sticks: 1 solvent reference, 5 sniffing sticks of intensity '0' to '4' and one stick of higher intensity (for less sensitive examiner)</p> <p>Price: 80 Euro plus VAT &amp; shipping costs*</p> <input type="checkbox"/> Sniffing sticks shall be shipped in a vacuum packaging, 1,00€ per stick	<input type="checkbox"/>

\*) shipping costs within Germany Euro 6,90

EU-member states Euro 20,00

Non-EU-member states shipping costs upon request.

\*\*) You will receive a complete code assignment, with substances and odour description.

\*\*\*) The vacuum packaging costs are € 1,00 per sniffing stick. We recommend the vacuum packaging if the order is shipped with air freight to avoid leakages of the odour solutions from the sniffing sticks due to the air pressure differences in the aircraft.

We will send you an order confirmation after receiving your order.

## Sniffing sticks for sensory evaluation of food contact materials

Labelled with (please select)

- Substances  
 Odour description  
 Code\*\*

Sniffing sticks shall be shipped in a vacuum packaging, 1,00€ per stick \*\*\*

Price per sniffing stick: 8,00 Euro (except for synthesized compounds) plus VAT & shipping costs\*

	Substances	CAS-number	Odour description	Code	Quantity
Additives/Degradation	2,4-Di-tert-butyl-phenol	96-76-4	fruity, chemical, fresh, phenolic	610	<input type="text"/>
	3,4-Dimethyl benzaldehyde	5973-71-7	bitter almond, marzipan	199	<input type="text"/>
	4-Ethyl benzaldehyde	4748-78-1	bitter almond, marzipan	005	<input type="text"/>
	4-Methyl benzaldehyde	104-87-0	bitter almond, marzipan, sweetish	409	<input type="text"/>
	4-Propyl benzaldehyde <i>Odour is only stable for 6 months.</i>	28785-06-0	marzipan, hay, liquorice	423	<input type="text"/>
	Tetrahydrothiophene	110-01-0	natural gas odorization	295	<input type="text"/>
Printing inks	Benzophenone	119-61-9	rose, flowery	017	<input type="text"/>
	Ethyl acrylate	140-88-5	paint colour, tooth filling	341	<input type="text"/>
	2-Ethyl-1-hexanol	104-76-7	rubbery, minty	466	<input type="text"/>
	2-Ethyl hexyl acrylate	103-11-7	dispersion paint, sweetish	706	<input type="text"/>
	Mineral oil	---	newspaper, heating oil petroleum	495	<input type="text"/>
	Oxidized linseed oil	---	oil paint, rancid	633	<input type="text"/>
Solvent	Butanone	78-93-3	nail polish remover, flowery	769	<input type="text"/>
	n-Butyl acetate	123-86-4	ice candy, ethereal, flowery	039	<input type="text"/>
	Cyclohexanone	108-94-1	marzipan, mint, flowery, nutty	748	<input type="text"/>
	1-Ethoxy-2-propanol	1569-02-4	solvent-like, fruity, medical	346	<input type="text"/>
	Ethyl acetate	141-78-6	adhesive, nail polish remover	520	<input type="text"/>
	Isophorone	78-59-1	swimming ring, sweetish, minty	284	<input type="text"/>
	1-Methoxy-2-propyl acetate (MPA)	108-65-6	adhesive, fruity, solvent-like	390	<input type="text"/>

	n-Propanol	71-23-8	solvent-like, fruity	364	<input type="checkbox"/>
	Toluene	108-88-3	adhesive, solvent-like	860	<input type="checkbox"/>
Elastomers	Acetophenone	98-86-2	flowery, sweetish	308	<input type="checkbox"/>
	Benzothiazole	95-16-9	gum	971	<input type="checkbox"/>
	Dodecylmercaptan	25103-58-6	grapefruit, foul	184	<input type="checkbox"/>
	5-Ethyliden-2-norbornene	16219-75-3	flowery, fruity	278	<input type="checkbox"/>
	Latex 20 Euro	---	latex, rubber, fishy	100	<input type="checkbox"/>
	Methacrylic acid	79-41-4	vinegar, disposable gloves	200	<input type="checkbox"/>
	4-Phenyl-1-cyclohexene	4994-16-5	pomelo peel, carpet, green	775	<input type="checkbox"/>
	4-Vinyl-1-cyclohexene	100-40-3	plastic, nail studio, sweetish	735	<input type="checkbox"/>
Adhesives	2-Ethyl-5,5-dimethyl-1,3-dioxane (2-EDD) quick adapt	768-58-1	bilberry, fruity, sweetish	213	<input type="checkbox"/>
	Latex 20 Euro	---	latex, rubber, fishy	100	<input type="checkbox"/>
	Methyl methacrylate	80-62-6	tooth filling, nail studio	069	<input type="checkbox"/>
Petroleum products	1,3-Dimethyl naphthaline 20 Euro	75-41-7	jute, tar, musty	030	<input type="checkbox"/>
	2-Methyl naphthaline	91-57-6	musty, mouldy	014	<input type="checkbox"/>
	Mineral oil	---	newspaper, heating oil petroleum	495	<input type="checkbox"/>
plastics	Acetaldehyde	75-07-0	fruity, sweetish, pungent	165	<input type="checkbox"/>
	2- Cyclopentyl cyclopentanone	4884-24-6	fruity, cool-fresh	492	<input type="checkbox"/>
	E,E-2,4-Decadienal	25152-84-5	frying oil, greasy, rancid	437	<input type="checkbox"/>
	Trans-4,5-epoxy-2-(E)-decenal 20 Euro	134454-31-2	grass, hay, green, metallic	130	<input type="checkbox"/>
	4-Ethyl phenol	123-07-9	leather, phenolic	451	<input type="checkbox"/>
	Heptanal	111-71-7	grass, green, soapy	053	<input type="checkbox"/>
	Hexanal	66-25-1	grass, green, rancid	676	<input type="checkbox"/>

plastics	1-Hexene-3-one	1629-60-3	plastic, burned, pungent	989	<input type="checkbox"/>
	E-2-Nonenal	18829-56-6	like cardboard	845	<input type="checkbox"/>
	8-Nonenal 20 Euro	39770-04-2	plastic, burnt, sweetish, fruity	534	<input type="checkbox"/>
	1-Nonen-3-one	24415-26-7	mushroom, earthy, musty	094	<input type="checkbox"/>
	Octanal	124-13-0	citrus, soapy	241	<input type="checkbox"/>
	1-Octen-3-one	4312-99-6	mushroom, earthy, musty	377	<input type="checkbox"/>
	Oxidized polyethylenterephthalate (PET) 20 Euro	---	sweetish, roasted, burnt, metallic	223	<input type="checkbox"/>
	Oxidized polyamide-6 20 Euro	---	sweetish, musty	268	<input type="checkbox"/>
	Oxidized Polyamide-6,6 20 Euro	---	popcorn, burnt, roasted, fishy, musty	153	<input type="checkbox"/>
	Oxidized polyethylene 20 Euro	---	plastic, blown candle, waxy	572	<input type="checkbox"/>
	Oxidized polypropylene 20 Euro	---	candle wax, burnt, roasted dough	087	<input type="checkbox"/>
	Oxidized polystyrene 20 Euro	---	styrene, sweetish, etheric	837	<input type="checkbox"/>
	Z-2-Penten-1-ol	1576-95-0	plastic, fruity, green	368	<input type="checkbox"/>
	Sotolon	28664-35-9	lovage, „Maggi“	912	<input type="checkbox"/>
Styrene	100-42-5	adhesive, burnt, plastic, sweetish	702	<input type="checkbox"/>	
paper & board	E,E-2,4-Decadienal	25152-84-5	frying oil, greasy, rancid	437	<input type="checkbox"/>
	2,6-Dimethoxy phenol	91-10-1	phenolic, animalistic, smoky	684	<input type="checkbox"/>
	δ-Dodecalactone	713-95-1	flowery, fruity, synthetic	057	<input type="checkbox"/>
	Dodecanal	112-54-9	raw carrot	235	<input type="checkbox"/>
	4,5-epoxy-2-(E)-decenal 20 Euro	134454-31-2	grass, green, hay, metallic	130	<input type="checkbox"/>
	4-Ethyl phenol	123-07-9	leather, phenolic	451	<input type="checkbox"/>
	(±)-5-Butyl-4-methyldihydro-2(3H)-furanone (Whiskeylacton)	39212-23-2	coconut, nutty, roasted	208	<input type="checkbox"/>

paper & board	Geosmin 20 Euro	19700-21-1	earthy, mouldy	041	<input type="checkbox"/>
	Hexanal	66-25-1	grass, green, rancid	676	<input type="checkbox"/>
	Hydrogen sulfide H <sub>2</sub> S	7783-06-4	lazy, rotten eggs	988	<input type="checkbox"/>
	2-Isopropyl-3-methoxy pyrazine	25773-40-4	earthy, like potato	259	<input type="checkbox"/>
	2-Methoxy phenol (Guajacol)	90-05-1	sweetish, smoked	221	<input type="checkbox"/>
	3-Methyl butyric acid (Isovaleric acid)	503-74-2	sweaty	251	<input type="checkbox"/>
	4-Methyl phenol (p-cresol)	106-44-5	horse stable, like excrement	299	<input type="checkbox"/>
	(E,E)-2,4-Nonadienal	5910-87-2	frying oil, fatty, rancid	337	<input type="checkbox"/>
	Nonanal	124-19-6	orange	934	<input type="checkbox"/>
	E-2-Nonenal	18829-56-6	like cardboard	845	<input type="checkbox"/>
	Octanal	124-13-0	citrus, soapy	241	<input type="checkbox"/>
	1-Octen-3-on	4312-99-6	mushroom, earthy, musty	377	<input type="checkbox"/>
	Phenol	108-95-2	phenolic	507	<input type="checkbox"/>
	4-Phenyl-1-cyclohexene	4994-16-5	Pomelo peel, carpet, green	775	<input type="checkbox"/>
	Phenyl acetic acid	103-82-2	honey, honey wax	513	<input type="checkbox"/>
	3-Propyl phenol	621-27-2	leather	641	<input type="checkbox"/>
	Sotolon	28664-35-9	lovage, „Maggi“	912	<input type="checkbox"/>
	2,4,6-Tribromo anisole	607-99-8	cork, musty	429	<input type="checkbox"/>
	2,4,6-Trichloro anisole	87-70-1	cork, musty	655	<input type="checkbox"/>
	2,4,6-Trichloro phenol	88-06-2	disinfectant, medical	942	<input type="checkbox"/>
Valeric acid	109-52-4	cheese-like, sweaty	622	<input type="checkbox"/>	
Vanillin	121-33-5	vanilla	583	<input type="checkbox"/>	
4-Vinyl-1-cyclohexen	100-40-3	plastic, nail studio, sweetish	735	<input type="checkbox"/>	

	4-Chlor-3-methyl phenol	59-50-7	phenolic, rubber	335	<input type="checkbox"/>
	Dimethyl disulfide	624-92-0	garlic, sulphurous	177	<input type="checkbox"/>
	(E,E)-2,4-Nonadienal	5910-87-2	frying oil, fatty, rancid	337	<input type="checkbox"/>
	(E,Z)-2,6-Nonadienal	557-48-2	cucumber	380	<input type="checkbox"/>
	4-Methyl phenol (p-cresol)	106-44-5	horse stable, like excrement	299	<input type="checkbox"/>
	2-(Methylthio)benzothiazole	615-22-5	medical, rubber	121	<input type="checkbox"/>
	E-2-Nonenal	18829-56-6	like cardboard	845	<input type="checkbox"/>
	Octanal	124-13-0	citrus, soapy	241	<input type="checkbox"/>
	1-Octen-3-one	4312-99-6	mushroom, earthy, musty	377	<input type="checkbox"/>
blank pen	Propylene glycol (solvent without odorant)	57-55-6	---	387	<input type="checkbox"/>
	Triacetin (solvent without odorant)	102-76-1	---	959	<input type="checkbox"/>
empty pens	Complete pen without aroma filling (for self-filling) 0,60 Euro	---	---	---	<input type="checkbox"/>
sniffing strip	block with 80 odour strips for smelling aroma solutions 3,50 Euro	---	---	---	<input type="checkbox"/>

\*) shipping costs within Germany Euro 6,90  
EU-member states Euro 20,00

Non-EU-member states shipping costs upon request.

\*\*\*) You will receive a complete code assignment, with substances and odour description.

\*\*\*) The vacuum packaging costs are € 1,00 per sniffing stick. We recommend the vacuum packaging if the order is shipped with air freight to avoid leakages of the odour solutions from the sniffing sticks due to the air pressure differences in the aircraft.

We will send you an order confirmation after receiving your order.

## Sniffing sticks for sensory evaluation: Interior air of road vehicles

(ISO 12219-7:2017, Annex D)

Labelled with (please select)

- Substances  
 Odour description  
 Code\*\*

Sniffing sticks shall be shipped in a vacuum packaging, 1,00€ per stick \*\*\*

Price per sniffing stick: 8,00 Euro (except for synthesized compounds) plus VAT & shipping costs\*

Substances	CAS-number	Odour description	Code	Quantity
2-Acetyl pyrazine	22047-25-2	popcorn, roasted , nutty	925	<input type="text"/>
Allyl isothiocyanate	57-06-7	mustard, pungent	732	<input type="text"/>
Benzaldehyde	100-52-7	marzipan	109	<input type="text"/>
Benzothiazole	95-16-9	rubber	971	<input type="text"/>
Butyric acid	107-92-6	sweaty, cheese-like	514	<input type="text"/>
Cedryl acetate 20 Euro	77-54-3	solvent like, woody	440	<input type="text"/>
E,E-2,4-Decadienal	25152-84-5	frying oil, greasy, rancid	437	<input type="text"/>
δ-Decalactone	705-86-2	coconut, sweetish	949	<input type="text"/>
Dimethyl sulfide Odour is only stable for 7 months.	75-18-3	sulphurous, rotten	329	<input type="text"/>
Acetic acid	64-19-7	vinegar, pungent	890	<input type="text"/>
Ethyl acetate	141-78-6	adhesive, nail polish remover	520	<input type="text"/>
Ethyl isobutyrate	97-62-1	apple, fruity	977	<input type="text"/>
Ethyl maltol	4940-11-8	caramel, sweetish	893	<input type="text"/>
Geosmin 20 Euro	16423-19-1	earthy, mouldy	041	<input type="text"/>
Isobutyl quinoline quick adapt	65442-31-1	earthy, mouldy	473	<input type="text"/>
2-Methoxy phenol (Guajacol)	90-05-1	sweetish, smoked	221	<input type="text"/>
Methyl cyclopentenolone	80-71-7	„Maggi“, aromatic, burnt	739	<input type="text"/>
Sodium hypochlorite solution High individual variance of sensitivity. Please note: This substance is corrosive and hazardous to water in the offered form.	7681-52-9	chlorine-like, swimming pool,	020	<input type="text"/>



Substances	CAS-number	Odour description	Code	Quantity
Phenol	108-95-2	phenolic	507	<input type="text"/>
Skatole	83-34-1	boar, like excrement	194	<input type="text"/>
Styrene	100-42-5	adhesive, burnt, plastic, sweetish	702	<input type="text"/>
2,4,6-Trichloro phenol	88-06-2	disinfectant, medical	942	<input type="text"/>
Trimethyl amine quick adapt High individual variance of sensitivity.	75-50-3	fishy, rancid	332	<input type="text"/>
Undecanal	112-44-7	cucumber, citrus, fatty	659	<input type="text"/>

<b>Sniffing sticks for panel selection</b> (DIN ISO 12219-7:2016, appendix G)				
Labelled with <i>(please select)</i>				
<input type="checkbox"/> Substances				
<input type="checkbox"/> Odour description				
<input type="checkbox"/> Code**				
<input type="checkbox"/> Sniffing sticks shall be shipped in a vacuum packaging, 1,00€ per stick ***				
Price per sniffing stick: 8,00 Euro (except for synthesized compounds) plus VAT & shipping costs*				
Substances	CAS-number	Odour description	Code	Quantity
2-Phenyl ethanol	60-12-8	rose, flowery	728	<input type="text"/>
Methyl cyclopentenolone	80-71-7	„Maggi“, aromatic, burnt	739	<input type="text"/>
3-Methylbutyric acid (Isovaleric acid)	503-74-2	sweaty	251	<input type="text"/>
$\gamma$ -Undecalactone	104-67-6	peach	782	<input type="text"/>
Skatole	83-34-1	boar, like excrement	194	<input type="text"/>
Propylene glycol (dissolvent without odorant)	57-55-6	---	387	<input type="text"/>

\*) shipping costs within Germany Euro 6,90

EU-member states Euro 20,00

Non-EU-member states shipping costs upon request.

\*\*\*) You will receive a complete code assignment, with substances and odour description.

\*\*\*) The vacuum packaging costs are € 1,00 per sniffing stick. We recommend the vacuum packaging if the order is shipped with air freight to avoid leakages of the odour solutions from the sniffing sticks due to the air pressure differences in the aircraft.

We will send you an order confirmation after receiving your order.

## Sniffingsticks for indoor odors

(according to the AGFÖ guide „Gerüche in Innenräumen“ Stand 2013)

Labelled with (please select)

- Substances  
 Odour description  
 Code\*\*

Sniffing sticks shall be shipped in a vacuum packaging, 1,00€ per stick \*\*\*

Price per sniffing stick: 8,00 Euro (except for synthesized compounds) plus VAT & shipping costs\*

Substances	CAS-number	Odour description	Code	Quantity
Acetaldehyde	75-07-0	fruity, sweetish, pungent	165	<input type="text"/>
Acetic acid	64-19-7	vinegar, pungent	890	<input type="text"/>
2-Acetyl pyrazine	22047-25-2	popcorn, roasted, nutty	925	<input type="text"/>
Ammonia	7664-41-7	ammonia, urine-like, pungent	543	<input type="text"/>
Benzaldehyde	100-52-7	marzipan	109	<input type="text"/>
Butyraldehyde	123-72-8	sweet, solution, fermented (yeast)	059	<input type="text"/>
Butyric acid	107-92-6	rancid, sweaty, cheese-like	514	<input type="text"/>
n-Butyl acetate	123-86-4	furniture-paint-like, ice candy, ethereal, flowery	039	<input type="text"/>
Hexanoic acid	142-62-1	goatlike, sweaty, animalistic, pungent	228	<input type="text"/>
Cadaverine <small>High individual variance of sensitivity.</small>	462-94-2	decay-like, sperm, sweetish	987	<input type="text"/>
Chlorothymol (4-Chlor-2-isopropyl-5-methylphenol)	89-68-9	rubbery, spicy, thyme	979	<input type="text"/>
Diacetyl (2,3-Butandione)	431-03-8	butter	272	<input type="text"/>
Diesel	---	heating oil-like, diesel-like	079	<input type="text"/>
Diethyl disulfide	110-81-6	cabbage-like, sulphurous	210	<input type="text"/>
Dimethyl sulfide <small>Odor is only stable for 7 months.</small>	75-18-3	sulphurous, rotten	329	<input type="text"/>
2-Ethyl-3,5-dimethylpyrazine <small>quick adapt</small>	13925-07-0	earthy, cacao	435	<input type="text"/>
Ethyl 2-methyl butyrate	7452-79-1	fruity, synthetic	301	<input type="text"/>
Ethyl pentanoate (Ethyl valerate)	539-82-2	fruity, sweetish	081	<input type="text"/>

Substances	CAS-number	Odour description	Code	Quantity
Geosmin 20 Euro	19700-21-1	earthy, mouldy	041	<input type="text"/>
Isopropyl alcohol	67-63-0	alcoholic, disinfectant	032	<input type="text"/>
Isovaleraldehyde (3-Methylbutanal)	590-86-3	malty, cocoa, chees- like, sweaty	159	<input type="text"/>
o-Cresol	95-48-7	phenolic, medical	004	<input type="text"/>
(+/-)-Limonene	138-86-3	lemon-like, fresh	216	<input type="text"/>
Methanthiol	74-93-1	cabbage, foul, sulphurous	644	<input type="text"/>
Methional	3268-49-3	cooked potato	146	<input type="text"/>
2-Methoxy phenol (Guajacol)	90-05-1	sweetish, smoked	221	<input type="text"/>
3-Methylbutanoic acid (Isovaleric acid)	503-74-2	sweaty	251	<input type="text"/>
Naphthalene	91-20-3	mothball	444	<input type="text"/>
E-2-Nonenal	18829-56-6	like cardboard, cucumber	845	<input type="text"/>
1-Octen-3-ol	3391-86-4	mushroom	293	<input type="text"/>
Oxidized linseed oil	---	oil paint, rancid	633	<input type="text"/>
4-Phenyl-1-cyclohexene	4994-16-5	pomelo peel, carpet, green	775	<input type="text"/>
Pentanal	110-62-3	sweet, rancid	143	<input type="text"/>
$\alpha$ - Pinene	7785-70-8	pinewood-like, resinous, softwood	980	<input type="text"/>
Styrene	100-42-5	adhesive, burnt, plastic, sweetish	702	<input type="text"/>
2,4,6-Trichloro anisole	87-70-1	cork, musty	655	<input type="text"/>
2,4,6-Trichloro phenol	88-06-2	chlorine-like, swimming pool, disinfectant, medical	942	<input type="text"/>
Trimethyl amine quick adapt High individual variance of sensitivity.	75-50-3	fishy, rancid	332	<input type="text"/>
Toluene	108-88-3	adhesive, solvent-like	860	<input type="text"/>

\*) shipping costs within Germany Euro 6,90

EU-member states Euro 20,00

Non-EU-member states shipping costs upon request.

\*\*\*) You will receive a complete code assignment, with substances and odour description.

\*\*\*) The vacuum packaging costs are € 1,00 per sniffing stick. We recommend the vacuum packaging if the order is shipped with air freight to avoid leakages of the odour solutions from the sniffing sticks due to the air pressure differences in the aircraft.

We will send you an order confirmation after receiving your order.

## Sniffingsticks for sensory evaluation of drinking water

according to "Requirements and Execution of Sensory Tests in Water Laboratories" nach Merkblatt DVGW W273 (M) (2019)

Labelled with (please select)

- Substances  
 Odour description  
 Code\*\*

Sniffing sticks shall be shipped in a vacuum packaging, 1,00€ per stick \*\*\*

Price per sniffing stick: 8,00 Euro (except for synthesized compounds) plus VAT & shipping costs\*

Substances	CAS-number	Odour description	Code	Quantity
1,8-Cineole	470-82-6	eucalyptus	765	<input type="text"/>
Cinnamon aldehyde	104-55-2	cinnamon	324	<input type="text"/>
Citral (cis, tr.)	5392-40-5	lemone	564	<input type="text"/>
2,6-Dichloro phenol	87-65-0	phenolic	881	<input type="text"/>
Dimethyl disulfide	624-92-0	garlic, sulphurous	177	<input type="text"/>
Ethyl butyrate	105-54-4	apple, fruity, sweet	992	<input type="text"/>
Eugenol	97-53-0	clove	413	<input type="text"/>
Geosmin 20 Euro	19700-21-1	earthy, mouldy	041	<input type="text"/>
trans,trans-2,4-Heptadienal	4313-03-5	marzipan, nutty, fruity, sweet	928	<input type="text"/>
3-cis-Hexenol	928-96-1	grass, green	446	<input type="text"/>
Indole	120-72-9	like excrement, animal, phenolic	969	<input type="text"/>
β-Ionone	79-77-6	violet	919	<input type="text"/>
Isoamyl acetate	123-92-2	banana, ice candy	442	<input type="text"/>
2-Isobutyl-3-methoxypyrazine quick adapt	24683-00-9	earthy, green, vegetative	895	<input type="text"/>
2-Isopropyl-3-methoxypyrazine	25773-40-4	earthy, like potato	259	<input type="text"/>
Methanethiol	74-93-1	cabbage, sulphurous	644	<input type="text"/>
2-Methyl isoborneol 20 Euro quick adapt	2371-42-8	earthy, mouldy, fresh	756	<input type="text"/>
(E,Z)-2,6-Nonadienal	557-48-2	cucumber	380	<input type="text"/>

1-Octen-3-ol	3391-86-4	mushroom	293	<input type="checkbox"/>
2,4,6-Tribromo anisole	607-99-8	cork, musty	429	<input type="checkbox"/>
2,4,6-Trichloro anisole	87-70-1	cork, musty	655	<input type="checkbox"/>
1,3,5-Trimethylbenzene	108-67-8	rubber, chlorine-like, musty	968	<input type="checkbox"/>

Note:

The sniffing sticks are preferred to be used for panel training in identifying odours. Additionally, they can be used for the preparation of **aqueous odour reference solutions**:

You can simply transfer a small amount of the odour solution from the sniffing stick onto paper by 'painting' on it – preferred a filter paper or an odour strip (see block with 80 odour strips for € 3,50).

Then you transfer the 'painted' or better 'odoured' paper/strip into a defined volume of sensory neutral water for a defined time. You can influence the intensity of the odour in the water by the area of paper/strip that is 'painted' and the volume of water in which the paper is transferred.

The **aqueous odour solutions** can be used for a **sensory odour test** and – with some limitations – for degustations: for most odour substances we use the food additives propylene glycol (PG) and triacetin (TA), respectively, as solvents. For only some aroma compounds we use a silicone oil as solvent which is not approved as food additive (please contact us on that information).

\*) shipping costs within Germany Euro 6,90

EU-member states Euro 20,00

Non-EU-member states shipping costs upon request.

\*\*\*) You will receive a complete code assignment, with substances and odour description.

\*\*\*) The vacuum packaging costs are € 1,00 per sniffing stick. We recommend the vacuum packaging if the order is shipped with air freight to avoid leakages of the odour solutions from the sniffing sticks due to the air pressure differences in the aircraft.

We will send you an order confirmation after receiving your order.

## Materials for Sensory Evaluation of Food

(Training in according to standard DIN 10961)

<b>Set-Off</b> <b>Flavours:</b> Anethole (anise), Benzaldehyde (bitter almond, marzipan), Butyric acid (sweaty, cheese-like), S-Carvone (caraway seed), Diacetyl (butter flavouring), Eugenol (clove), 3-cis-Hexenol (fresh gras, green), Isoamyl acetate (banana, ice candy), Linalool (flowery, rose), 1-Menthol (peppermint), $\gamma$ -Nonalactone (coconut), 1-Octen-3-ol (mushroom), $\gamma$ -Undecalactone (peach), Vanillin (vanilla), Cinnamon aldehyde (cinnamon)	Quantity
<b>Poster with 15 sniffing sticks</b> Labelled with names of substances, poster coloured, laminated and light resistant in German Language Price: 170 Euro plus VAT & shipping costs*	<input type="checkbox"/>
<b>Trainings set with 15 aroma solutions and tear off sniffing stripes</b> Storage box with 15 x 2,5 mL vials, labelled with random codes, DIN 4 A paper with assignment, block with 80 odour trips price: 125 Euro plus VAT & shipping costs*	<input type="checkbox"/>
<b>Trainings set with 15 sniffing sticks</b> labelled with <i>(please select)</i> <input type="checkbox"/> Substances <input type="checkbox"/> Code** Price: 110 Euro plus VAT & shipping costs*	<input type="checkbox"/>

<b>Sniffing sticks for sensory evaluation of food</b> Labelled with <i>(please select)</i> <input type="checkbox"/> Substances <input type="checkbox"/> Odour description <input type="checkbox"/> Code** <input type="checkbox"/> Sniffing sticks shall be shipped in a vacuum packaging, 1,00€ per stick *** Price per sniffing stick: 8,00 Euro (except for synthesized compounds) plus VAT & shipping costs*				
Substances	CAS-number	Odour description	Code	Quantity
Acetic acid	64-19-7	vinegar, pungent	890	<input type="checkbox"/>
Acetoin (3-Hydroxy-2-butanone)	51555-24-9 513-86-0	yoghurt, milky	122	<input type="checkbox"/>
2-Acetyl pyrazine	22047-25-2	popcorn, roasted, nutty	925	<input type="checkbox"/>
Allyl isothiocyanate	57-06-7	mustard, pungent	732	<input type="checkbox"/>
o-Aminoacetophenone	551-93-9	bee wax, acacia blossom	003	<input type="checkbox"/>
Ammonia	7664-41-7	ammonia, urine-like, pungent	543	<input type="checkbox"/>
Androstenone <small>This substance can be recognized by only a part of the examiners.</small> <b>20 Euro</b>	18339-16-7	boar	995	<input type="checkbox"/>

Substances	CAS-number	Odour description	Code	Quantity
Anethole	104-46-1	anise	431	<input type="text"/>
Benzaldehyde	100-52-7	marzipan	109	<input type="text"/>
Benzyl acetate	140-11-4	banana, ice candy fruity, flowery	281	<input type="text"/>
Bergamot (volatile oil)	---	citrus, fruity	671	<input type="text"/>
Butyric acid	107-92-6	sweaty, cheese-like	514	<input type="text"/>
Camphor	76-22-2	camphor, eucalyptus	008	<input type="text"/>
$\beta$ -Caryophyllene	87-44-5	sweaty, woody	414	<input type="text"/>
R-Carvone	6485-40-1	minty	846	<input type="text"/>
S-Carvone	2244-16-8	caraway seed	600	<input type="text"/>
Cherry (natural aroma)	---	cherry	136	<input type="text"/>
Cinnamon aldehyde	104-55-2	cinnamon	324	<input type="text"/>
Citral (cis, tr.)	5392-40-5	lemon, lime	564	<input type="text"/>
Coumarin	91-64-5	vanilla, sweet woodruff	234	<input type="text"/>
Damascenone	23696-85-7	sweaty, fruity, vegetative	797	<input type="text"/>
E,E-2,4-Decadienal	25152-84-5	frying oil, greasy, rancid	437	<input type="text"/>
$\delta$ -Decalactone	705-86-2	coconut, sweetish	949	<input type="text"/>
$\delta$ -Dodecalactone	713-95-1	flowery, fruity, synthetic	057	<input type="text"/>
Diacetyl	431-03-8	butter	272	<input type="text"/>
Diallyl disulfide	2179-57-9	garlic	320	<input type="text"/>
Dimethyl disulfide	624-92-0	garlic, sulphurous	177	<input type="text"/>
Dimethyl sulfide <small>Odor is only stable for 7 months.</small>	75-18-3	sulphurous, rotten	329	<input type="text"/>
2,5-Dimethylthiophene	638-02-8	grilled onion	905	<input type="text"/>



Substances	CAS-number	Odour description	Code	Quantity
Dimethyl trisulfide	3658-80-8	onion, sulphurous, rotten	305	<input type="text"/>
Ethyl acetate	141-78-6	adhesive, nail polish remover	520	<input type="text"/>
Ethyl isobutyrate	97-62-1	apple, fruity	977	<input type="text"/>
Eucalyptole (1,8-Cineol)	470-82-6	eucalyptus	765	<input type="text"/>
Eugenol	97-53-0	clove	413	<input type="text"/>
Filbertone (5-Methyl-2-hepten-4-one)	102322-83-8	hazelnut	852	<input type="text"/>
Furaneol (2,5-Dimethyl-4-hydroxy-(2H)-furan-3-on)	3658-77-3	candy floss, caramel	024	<input type="text"/>
Furfural	98-01-1	almond, sweet	951	<input type="text"/>
5-Butyl-4-methyldihydro-2(3H)-furanone (Whiskey lactone)	39212-23-2	coconut, nutty, roasted	208	<input type="text"/>
Geosmin 20 Euro	19700-21-1	earthy, mouldy	041	<input type="text"/>
4-cis-Heptenal	6728-31-0	rancid, fishy, „cold store“	480	<input type="text"/>
3-cis-Hexenol	928-96-1	grass, green	446	<input type="text"/>
Hydrogen sulfide H <sub>2</sub> S	7783-06-4	lazy, rotten eggs	988	<input type="text"/>
β-Ionone	79-77-6	violet	919	<input type="text"/>
Isoamyl acetate	123-92-2	banana, ice candy	442	<input type="text"/>
Isobutylamine	78-81-9	cheesy, fishy	850	<input type="text"/>
Isobutyl quinoline	65442-31-1	earthy, mouldy	473	<input type="text"/>
Isobutyraldehyde	78-84-2	green, sweetish, cheesy	624	<input type="text"/>
2-Isopropyl-3-methoxypyrazine	25773-40-4	earthy, like potato	259	<input type="text"/>
Isovaleraldehyde	590-86-3	cocoa, cheese-like, sweetish	159	<input type="text"/>
Jasmine (natural aroma)	8022-96-6	jasmine, flowery	550	<input type="text"/>
Lemon (natural aroma)	---	lemon	089	<input type="text"/>

Substances	CAS-number	Odour description	Code	Quantity
R-(+) Limonene	5989-27-5	lemon	717	<input type="text"/>
Linalool	78-70-6	flowery	986	<input type="text"/>
1-Menthol	2216-51-5	peppermint	597	<input type="text"/>
Methanethiol	74-93-1	cabbage, sulphurous	644	<input type="text"/>
Methional	3268-49-3	cooked potato	146	<input type="text"/>
4-Methoxy-2-methyl-2-butanethiol	94087-83-9	black currant (low concentration) cat piss, animal (high concentration)	965	<input type="text"/>
2-Methoxy phenol (Guajacol)	90-05-1	sweetish, smoked	221	<input type="text"/>
3-Methyl-2,4-nonandione	113486-29-6	hay, straw, herbaceous	690	<input type="text"/>
3-Methyl-1-butanol <small>quick adapt</small>	123-51-3	banana, solvent like, fruity-sweet	857	<input type="text"/>
4-Methyl-4-mercaptopentan-2-on	19872-52-7	grapefruit (low concentration), cat urine (high concentration)	485	<input type="text"/>
4-Methyl-2-pentanone	108-10-1	nail polish, fruity	771	<input type="text"/>
(E,E)-2,4-Nonadienal	5910-87-2	frying oil, fatty, rancid	337	<input type="text"/>
(E,Z)-2,6-Nonadienal	557-48-2	cucumber	380	<input type="text"/>
$\gamma$ -Nonalactone	104-61-0	coconut	935	<input type="text"/>
1-Octen-3-ol	3391-86-4	mushroom	293	<input type="text"/>
Orange (natural aroma)	---	orange	433	<input type="text"/>
Pepper (volatile oil)	---	pepper, spicy	043	<input type="text"/>
2-Phenyl ethanol	60-12-8	rose, flowery	728	<input type="text"/>
Propionic acid	79-09-4	acidic, sweaty, pungent	839	<input type="text"/>
Propionaldehyde	123-38-6	fruity, sweetish, floral	385	<input type="text"/>
Rosemary (volatile oil)	---	rosemary	747	<input type="text"/>

Substances	CAS-number	Odour description	Code	Quantity
Skatole	83-34-1	boar, like excrement	194	<input type="text"/>
Smoke flavour (natural aroma)	---	smoked	784	<input type="text"/>
Strawberry (natural aroma)	---	strawberry	818	<input type="text"/>
Thymol	89-83-8	thyme	175	<input type="text"/>
Trimethylamine quick adapt High individual variance of sensitivity.	75-50-3	fishy, rancid	332	<input type="text"/>
2,3,5-Trimethylpyrazine	14667-55-1	cocoa, nutty, slightly sour	527	<input type="text"/>
$\gamma$ -Undecalactone	104-67-6	peach	782	<input type="text"/>
Undecanal	112-44-7	cucumber, citrus, fatty	659	<input type="text"/>
Valeric acid	109-52-4	cheese-like, sweaty	622	<input type="text"/>
Vanillin	121-33-5	vanilla	583	<input type="text"/>
Propylene glycol (solvent without odorant)	57-55-6	---	387	<input type="text"/>
Triacetin (solvent without odorant)	102-76-1	---	959	<input type="text"/>
Complete pen without aroma filling 0,60 Euro	---	---	---	<input type="text"/>
block with 80 odour strips for smelling aroma solutions 3,50 Euro	---	---	---	<input type="text"/>

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