

Order: Sniffing Sticks and Training Sets

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



Company	
Name	
Delivery address	
Order number	
E-Mail for delivery of invoice	

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Materials for Food Contact Materials

Set-Off (15 odours/ taints) Flavours: : 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	Quantity
Poster with 12 sniffing sticks Labelled with names of substances, poster coloured, laminated and light resistant in German Language (without 2-Ethylhexanol, Toluene, 1,3-Dimethyl naphthalene) Price: 170 Euro plus VAT & shipping costs*	
Poster with 25 sniffing sticks Labelled with names of substances, poster coloured, laminated and light resistant in English Language (without: 2-Ethylhexanol, Isophorone, Oxidized linseed oil, Toluene <u>additionally:</u> 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*	
Training set with 15 aroma solutions and odour strips Storage box with 15 x 2,5 ml vials, labelled with random codes, DIN A4 paper with assignment, block with 60 odour trips Price: 125 Euro plus VAT & shipping costs*	
Training set with 15 sniffing sticks Labelled with (please select) ☐ Substances ☐ Code** Price: 125 Euro plus VAT & shipping costs*	

Sniffing sticks for ranking test of intensity scale according to standard EN 1230 and DIN 10955 (2-Methylnaphthalene) 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) Price: 50 Euro plus VAT & shipping costs* ☐ Sniffing sticks shall be shipped in a vacuum packaging, 1,00€ per stick	☐
Sniffing sticks for ranking test of intensity scale with n-Butanol 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) Price: 50 Euro plus VAT & shipping costs* ☐ Sniffing sticks shall be shipped in a vacuum packaging, 1,00€ per stick	☐
Sniffing sticks for ranking test of intensity scale with 3-Methyl butyric acid (Isovaleric acid) 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) Price: 50 Euro plus VAT & shipping costs* ☐ Sniffing sticks shall be shipped in a vacuum packaging, 1,00€ per stick High individual variance of sensitivity.	☐
Sniffing sticks for ranking test of intensity scale with oxidized polypropylene 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) Price: 80 Euro plus VAT & shipping costs* ☐ Sniffing sticks shall be shipped in a vacuum packaging, 1,00€ per stick	☐
Sniffing sticks for ranking test of intensity scale with oxidized polyethylene 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) Price: 80 Euro plus VAT & shipping costs* ☐ Sniffing sticks shall be shipped in a vacuum packaging, 1,00€ per stick	☐

*) shipping costs within Germany Euro 8,00

EU-member states Euro 22,00

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

	n-Propanol	71-23-8	solvent-like, fruity	364	
	Toluene	108-88-3	adhesive, solvent-like	860	
Elastomers	Acetophenone	98-86-2	flowery, sweetish	308	
	Benzothiazole	95-16-9	gum	971	
	Dodecylmercaptan	25103-58-6	grapefruit, foul	184	
	5-Ethyliden-2-norbornene	16219-75-3	flowery, fruity	278	
	Latex 20 Euro	---	latex, rubber, fishy	100	
	Methacrylic acid	79-41-4	vinegar, disposable gloves	200	
	4-Phenyl-1-cyclohexene	4994-16-5	pomelo peel, carpet, green	775	
	4-Vinyl-1-cyclohexene	100-40-3	plastic, nail studio, sweetish	735	
Adhesives	2-Ethyl-5,5-dimethyl-1,3-dioxane (2-EDD) quick adapt	768-58-1	bilberry, fruity, sweetish	213	
	Latex 20 Euro	---	latex, rubber, fishy	100	
	Methyl methacrylate	80-62-6	tooth filling, nail studio	069	
Petroleumproducts	1,3-Dimethyl naphthalene 20 Euro	75-41-7	jute, tar, musty	030	
	2-Methyl naphthalene	91-57-6	musty, mouldy	014	
	Mineral oil	---	newspaper, heating oil petroleum	495	
	Xylene	1330-20-7	petroleum, solvent	833	
plastics	Acetaldehyde	75-07-0	fruity, sweetish, pungent	165	
	2-Cyclopentyl cyclopentanone	4884-24-6	fruity, cool-fresh	492	
	E,E-2,4-Decadienal	25152-84-5	frying oil, greasy, rancid	437	
	Trans-4,5-epoxy-2-(E)-decenal 20 Euro	134454-31-2	grass, hay, green, metallic	130	
	4-Ethyl phenol	123-07-9	leather, phenolic	451	
	Heptanal	111-71-7	grass, green, soapy	053	

plastics	Hexanal Odor is stable for max. 1 year	66-25-1	grass, green, rancid	676	
	1-Hexene-3-one	1629-60-3	plastic, burned, pungent	989	
	E-2-Nonenal	18829-56-6	like cardboard	845	
	8-Nonenal Odour is only stable for 4 months 20 Euro	39770-04-2	plastic, burnt, sweetish, fruity	534	
	1-Nonen-3-one	24415-26-7	mushroom, earthy, musty	094	
	Octanal	124-13-0	citrus, soapy	241	
	1-Octen-3-one	4312-99-6	mushroom, earthy, musty	377	
	Oxidized polyethylenterephthalate (PET) 20 Euro	---	sweetish, roasted, burnt, metallic	223	
	Oxidized polyamide-6 20 Euro	---	sweetish, musty	268	
	Oxidized Polyamide-6,6 20 Euro	---	popcorn, burnt, roasted, fishy, musty	153	
	Oxidized polyethylene 20 Euro	---	plastic, blown candle, waxy	572	
	Oxidized polypropylene 20 Euro	---	candle wax, burnt, roasted dough	087	
	Oxidized polystyrene 20 Euro	---	styrene, sweetish, etheric	837	
	Z-2-Penten-1-ol	1576-95-0	plastic, fruity, green	368	
	Sotolon	28664-35-9	lovage, „Maggi“	912	
	Styrene	100-42-5	adhesive, burnt, plastic, sweetish	702	
paper & board	E,E-2,4-Decadienal	25152-84-5	frying oil, greasy, rancid	437	
	2,6-Dimethoxy phenol	91-10-1	phenolic, animalistic, smoky	684	
	δ-Dodecalactone	713-95-1	flowery, fruity, synthetic	057	
	Dodecanal	112-54-9	raw carrot	235	
	4,5-epoxy-2-(E)-decenal 20 Euro	134454-31-2	grass, green, hay, metallic	130	
	4-Ethyl phenol	123-07-9	leather, phenolic	451	

paper & board	(±)-5-Butyl-4-methyldihydro-2(3H)-furanone (Whiskeylacton)	39212-23-2	coconut, nutty, roasted	208	☐
	Geosmin 20 Euro	19700-21-1	earthy, mouldy	041	☐
	Hexanal Odor is stable for max. 1 year	66-25-1	grass, green, rancid	676	☐
	Hydrogen sulfide H ₂ S	7783-06-4	lazy, rotten eggs	988	☐
	2-Isopropyl-3-methoxy pyrazine	25773-40-4	earthy, like potato	259	☐
	2-Methoxy phenol (Guajacol)	90-05-1	sweetish, smoked	221	☐
	3-Methyl butyric acid (Isovaleric acid)	503-74-2	sweaty	251	☐
	4-Methyl phenol (p-cresol)	106-44-5	horse stable, excrement	299	☐
	(E,E)-2,4-Nonadienal	5910-87-2	frying oil, fatty, rancid	337	☐
	Nonanal	124-19-6	orange	934	☐
	E-2-Nonenal	18829-56-6	cardboard	845	☐
	Octanal	124-13-0	citrus, soapy	241	☐
	1-Octen-3-on	4312-99-6	mushroom, earthy, musty	377	☐
	Phenol	108-95-2	phenolic	507	☐
	4-Phenyl-1-cyclohexene	4994-16-5	Pomelo peel, carpet, green	775	☐
	Phenyl acetic acid	103-82-2	honey, honey wax	513	☐
	3-Propyl phenol	621-27-2	leather	641	☐
	Sotolon	28664-35-9	lovage, „Maggi“	912	☐
	2,4,6-Tribromo anisole	607-99-8	cork, musty	429	☐
	2,4,6-Trichloro anisole	87-40-1	cork, musty	655	☐
	2,4,6-Trichloro phenol	88-06-2	disinfectant, medical	942	☐
	Valeric acid	109-52-4	cheese, sweaty	622	☐
	Vanillin	121-33-5	vanilla	583	☐

	4-Vinyl-1-cyclohexen	100-40-3	plastic, nail studio, sweetish	735	
	4-Chlor-3-methyl phenol	59-50-7	phenolic, rubber	335	
	Dimethyl disulfide	624-92-0	garlic, sulphurous	177	
	(E,E)-2,4-Nonadienal	5910-87-2	frying oil, fatty, rancid	337	
	(E,Z)-2,6-Nonadienal	557-48-2	cucumber	380	
	4-Methyl phenol (p-cresol)	106-44-5	horse stable, excrement	299	
	2-(Methylthio)benzothiazole	615-22-5	medical, rubber	121	
	E-2-Nonenal	18829-56-6	cardboard	845	
	Octanal	124-13-0	citrus, soapy	241	
	1-Octen-3-one	4312-99-6	mushroom, earthy, musty	377	
blank pen	Propylene glycol (solvent without odorant)	57-55-6	---	387	
	Triacetin (solvent without odorant)	102-76-1	---	959	
empty pens	Complete pen without aroma filling (for self-filling) 0,60 Euro	---	---	---	
sniffing strip	block with 60 odour strips for smelling aroma solutions 3,50 Euro	---	---	---	

*) shipping costs within Germany Euro 8,00

EU-member states Euro 22,00

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	
Allyl isothiocyanate	57-06-7	mustard, pungent	732	
Benzaldehyde	100-52-7	marzipan	109	
Benzothiazole	95-16-9	rubber	971	
Butyric acid	107-92-6	sweaty, cheese	514	
Calcium hypochlorite	7778-54-3	chlorine	020	
Cedryl acetate 20 Euro	77-54-3	solvent like, woody	440	
E,E-2,4-Decadienal	25152-84-5	frying oil, greasy, rancid	437	
δ-Decalactone	705-86-2	coconut, sweetish	949	
Dimethyl sulfide Odour is only stable for 7 months.	75-18-3	sulphurous, rotten	329	
Acetic acid	64-19-7	vinegar, pungent	890	
Ethyl acetate	141-78-6	adhesive, nail polish remover	520	
Ethyl isobutyrate	97-62-1	apple, fruity	977	
Ethyl maltol	4940-11-8	caramel, sweetish	893	
Geosmin (see 2-Ethyl fenchol) 20 Euro	16423-19-1	earthy, mouldy	041	
2-Ethyl fenchol (as a cheaper alternative for Geosmin)	18368-91-7	earthy, mouldy	042	
Isobutyl quinoline quick adapt	65442-31-1	earthy, mouldy	473	
2-Methoxy phenol (Guajacol)	90-05-1	sweetish, smoked	221	

Substances	CAS-number	Odour description	Code	Quantity
Methyl cyclopentenolone	80-71-7	„Maggi“, aromatic, burnt	739	
Phenol	108-95-2	phenolic	507	
Skatole	83-34-1	boar, excrement	194	
Styrene	100-42-5	adhesive, burnt, plastic, sweetish	702	
2,4,6-Trichloro phenol	88-06-2	disinfectant, medical	942	
Trimethyl amine <i>quick adapt, high individual variance of sensitivity.</i>	75-50-3	fishy, rancid	332	
Undecanal	112-44-7	cucumber, citrus, fatty	659	

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

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

Substances	CAS-number	Odour description	Code	Quantity
Geosmin (see 2-Ethyl fenchol) 20 Euro	16423-19-1	earthy, mouldy	041	
2-Ethyl fenchol (as a cheaper alternative for Geosmin)	18368-91-7	earthy, mouldy	042	
Isopropyl alcohol	67-63-0	alcoholic, disinfectant	032	
Isovaleraldehyde (3-Methylbutanal)	590-86-3	malty, cocoa, cheese, sweaty	159	
o-Cresol	95-48-7	phenolic, medical	004	
(+/-)-Limonene	138-86-3	lemon, fresh	216	
Methanthiol	74-93-1	cabbage, foul, sulphurous	644	
Methional Odor is stable for max. 6 months.	3268-49-3	cooked potato	146	
2-Methoxy phenol (Guajacol)	90-05-1	sweetish, smoked	221	
3-Methylbutanoic acid (Isovaleric acid)	503-74-2	sweaty	251	
Naphthalene	91-20-3	mothball	444	
E-2-Nonenal	18829-56-6	cardboard, cucumber	845	
1-Octen-3-ol	3391-86-4	mushroom	293	
Oxidized linseed oil	---	oil paint, rancid	633	
4-Phenyl-1-cyclohexene	4994-16-5	pomelo peel, carpet, green	775	
Pentanal	110-62-3	sweet, rancid	143	
α - Pinene	7785-70-8	pinewood, resinous, softwood	980	
Styrene	100-42-5	adhesive, burnt, plastic, sweetish	702	
2,4,6-Trichloro anisole	87-40-1	cork, musty	655	
2,4,6-Trichloro phenol	88-06-2	chlorine, swimming pool, disinfectant, medical	942	
Trimethyl amine quick adapt, high individual variance of sensitivity	75-50-3	fishy, rancid	332	
Toluene	108-88-3	adhesive, solvent	860	

*) shipping costs within Germany Euro 8,00

EU-member states Euro 22,00

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	
Cinnamon aldehyde	104-55-2	cinnamon	324	
Citral (cis, tr.)	5392-40-5	lemone	564	
2,6-Dichloro phenol	87-65-0	phenolic	881	
Dimethyl disulfide	624-92-0	garlic, sulphurous	177	
Ethyl butyrate	105-54-4	apple, fruity, sweet	992	
Eugenol	97-53-0	clove	413	
Geosmin (see 2-Ethyl fenchol) 20 Euro	16423-19-1	earthy, mouldy	041	
2-Ethyl fenchol (as a cheaper alternative for Geosmin)	18368-91-7	earthy, mouldy	042	
trans,trans-2,4-Heptadienal	4313-03-5	marzipan, nutty, fruity, sweet	928	
3-cis-Hexenol	928-96-1	grass, green	446	
Indole	120-72-9	excrement, animal, phenolic	969	
β-Ionone	79-77-6	violet	919	
Isoamyl acetate	123-92-2	banana, ice candy	442	
2-Isobutyl-3-methoxypyrazine quick adapt	24683-00-9	earthy, green, vegetative	895	
2-Isopropyl-3-methoxypyrazine	25773-40-4	earthy, like potato	259	
Methanethiol	74-93-1	cabbage, sulphurous	644	
2-Methyl isoborneol 20 Euro quick adapt	2371-42-8	earthy, mouldy, fresh	756	

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*

(E,Z)-2,6-Nonadienal	557-48-2	cucumber	380	☐
1-Octen-3-ol	3391-86-4	mushroom	293	☐
2,4,6-Tribromo anisole	607-99-8	cork, musty	429	☐
2,4,6-Trichloro anisole	87-40-1	cork, musty	655	☐
1,3,5-Trimethylbenzene	108-67-8	rubber, chlorine, musty	968	☐

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 60 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 8,00

EU-member states Euro 22,00

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.

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Materials for Sensory Evaluation of Food

(Training in according to standard DIN 10961)

Set-Off Flavours: 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), γ -Nonalactone (coconut), 1-Octen-3-ol (mushroom), γ -Undecalactone (peach), Vanillin (vanilla), Cinnamon aldehyde (cinnamon)	Quantity
Poster with 15 sniffing sticks Labelled with names of substances, poster coloured, laminated and light resistant in German Language Price: 170 Euro plus VAT & shipping costs*	
Trainings set with 15 aroma solutions and tear off sniffing stripes Storage box with 15 x 2,5 mL vials, labelled with random codes, DIN 4 A paper with assignment, block with 60 odour trips price: 125 Euro plus VAT & shipping costs*	
Trainings set with 15 sniffing sticks labelled with (please select) ☐ Substances ☐ Code** Price: 125 Euro plus VAT & shipping costs*	

Sniffing sticks for sensory evaluation of food 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
Acetic acid	64-19-7	vinegar, pungent	890	
Acetoin (3-Hydroxy-2-butanone)	51555-24-9 513-86-0	yoghurt, milky	122	
2-Acetyl pyrazine	22047-25-2	popcorn, roasted, nutty	925	
Allyl isothiocyanate	57-06-7	mustard, pungent	732	
o-Aminoacetophenone	551-93-9	bee wax, acacia blossom	003	
Ammonia	7664-41-7	ammonia, urine, pungent	543	
Androstenone This substance can be recognized by only a part of the examiners. 20 Euro	18339-16-7	boar	995	

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

Substances	CAS-number	Odour description	Code	Quantity
Dimethyl trisulfide	3658-80-8	onion, sulphurous, rotten	305	
Ethyl acetate	141-78-6	adhesive, nail polish remover	520	
Ethyl isobutyrate	97-62-1	apple, fruity	977	
Eucalyptole (1,8-Cineol)	470-82-6	eucalyptus	765	
Eugenol	97-53-0	clove	413	
Filbertone (5-Methyl-2-hepten-4-one)	102322-83-8	hazelnut	852	
Furaneol (2,5-Dimethyl-4-hydroxy-(2H)-furan-3-on) Odor is stable for max. 4 months	3658-77-3	candy floss, caramel	024	
Furfural	98-01-1	almond, sweet	951	
5-Butyl-4-methyldihydro-2(3H)-furanone (Whiskey lactone)	39212-23-2	coconut, nutty, roasted	208	
Geosmin (see 2-Ethyl fenchol) 20 Euro	16423-19-1	earthy, mouldy	041	
2-Ethyl fenchol (as a cheaper alternative for Geosmin)	18368-91-7	earthy, mouldy	042	
4-cis-Heptenal	6728-31-0	rancid, fishy, „cold store“	480	
3-cis-Hexenol	928-96-1	grass, green	446	
Hydrogen sulfide H ₂ S	7783-06-4	lazy, rotten eggs	988	
β-Ionone	79-77-6	violet	919	
Isoamyl acetate	123-92-2	banana, ice candy	442	
Isobutylamine	78-81-9	cheesy, fishy	850	
Isobutyl quinoline	65442-31-1	earthy, mouldy	473	
Isobutyraldehyde	78-84-2	green, sweetish, cheesy	624	
2-Isopropyl-3-methoxypyrazine	25773-40-4	earthy, potato	259	
Isovaleraldehyde	590-86-3	cocoa, cheese, sweetish	159	
Jasmine (natural aroma)	8022-96-6	jasmine, flowery	550	

Substances	CAS-number	Odour description	Code	Quantity
Lemon (natural aroma)	---	lemon	089	
R-(+) Limonene	5989-27-5	lemon	717	
Linalool	78-70-6	flowery	986	
1-Menthol	2216-51-5	peppermint	597	
Methanethiol	74-93-1	cabbage, sulphurous	644	
Methional Odor is stable for max. 6 months	3268-49-3	cooked potato	146	
4-Methoxy-2-methyl-2-butanethiol Odor is stable for max. 4 months	94087-83-9	black currant (low concentration) cat piss, animal (high concentration)	965	
2-Methoxy phenol (Guajacol)	90-05-1	sweetish, smoked	221	
3-Methyl-1-butanol quick adapt	123-51-3	banana, solvent, fruity-sweet	857	
2-Methylbutyraldehyde	96-17-3	cocoa, fermented, musty, fruity	752	
3-Methyl-2,4-nonandione	113486-29-6	hay, straw, herbaceous	690	
4-Methyl-4-mercaptopentan-2-on	19872-52-7	grapefruit (low concentration), cat urine (high concentration)	485	
4-Methyl-2-pentanone	108-10-1	nail polish, fruity	771	
(E,E)-2,4-Nonadienal	5910-87-2	frying oil, fatty, rancid	337	
(E,Z)-2,6-Nonadienal	557-48-2	cucumber	380	
γ -Nonalactone	104-61-0	coconut	935	
1-Octen-3-ol	3391-86-4	mushroom	293	
Orange (natural aroma)	---	orange	433	
Pepper (volatile oil)	---	pepper, spicy	043	
2-Phenyl ethanol	60-12-8	rose, flowery	728	
Propionic acid	79-09-4	acidic, sweaty, pungent	839	

Substances	CAS-number	Odour description	Code	Quantity
Propionaldehyde Odour is only stable for 6 months	123-38-6	fruity, sweetish, floral	385	
Rosemary (volatile oil)	---	rosemary	747	
Skatole	83-34-1	boar, excrement	194	
Smoke flavour (natural aroma)	---	smoked	784	
Strawberry (natural aroma)	---	strawberry	818	
Thymol	89-83-8	thyme	175	
Trimethylamine quick adapt High individual variance of sensitivity.	75-50-3	fishy, rancid	332	
2,3,5-Trimethylpyrazine	14667-55-1	cocoa, nutty, slightly sour	527	
γ -Undecalactone	104-67-6	peach	782	
Undecanal	112-44-7	cucumber, citrus, fatty	659	
Valeric acid	109-52-4	cheese, sweaty	622	
Vanillin	121-33-5	vanilla	583	
Propylene glycol (solvent without odorant)	57-55-6	---	387	
Triacetin (solvent without odorant)	102-76-1	---	959	
Complete pen without aroma filling 0,60 Euro	---	---	---	
block with 60 odour strips for smelling aroma solutions 3,50 Euro	---	---	---	

*) shipping costs within Germany Euro 8,00

EU-member states Euro 22,00

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.