Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

chemical-physical

organoleptic

immunological, molecular biological & microbiological

Food and Feed

product catalogue 2026

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Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

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Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

DRRR - The company

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien GmbH (DRRR GmbH)

Proficiency testing provider

The DRRR offers laboratories from the processing industry as well as official and private laboratories all aspects of quality assurance from one single source. Our focus is on food, consumer goods, packaging, building materials, plastics (polymers) and textiles, as well as microbiological analysis in these categories.

More than 1100 PT's per year

Accreditation ISO/IEC 17043:2023 (A2LA)

The DRRR is an accredited proficiency testing provider by A2LA according to ISO/IEC 17043:2023. The accreditation is only valid for the matrices/parameters listed on the A2LA scope of accreditation certificate [#5494.01].

Whether a proficiency test is covered or not covered by the scope of accreditation by A2LA can be viewed in our online portal (ODIN).

Accredited PT-provider

Accreditation DIN EN ISO/IEC 17043:2023 (DAkkS)

The DRRR is an accredited proficiency testing provider by DAkkS according to DIN EN ISO/IEC 17043:2023. The accreditation is valid only for the scope listed in the annex of the accreditation certificate [D-PP-17063-01-00].

Whether a proficiency test is covered or not covered by the scope of accreditation by DAkkS can be viewed in our online portal (ODIN).

Reference material producer

We offer many certified reference materials as well as advise on quality matters and quality assurance training in the laboratory and the production.

High-quality reference material

Customer support

We provide advice to our customers in all question of validation of chemical-physical, microbiological, organoleptic and physical-mechanical analysis or statistical questions.

Any time competent contact persons

Proficiency testing

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

Food industry

The DRRR offers in the field of the quality assurance for the chemical analysis a variety of different primary, intermediate and final products for the food and packaging industry.

The laboratories can secure their analytics with the DRRR services as well as main parameters like fat, protein and dry matter and side and trace parameters.

- **Milk and milk products**
- **Fruit and fruit juices**
- **Sweets and pastries**
- **Food of animal origin**
- **Meat and egg products**
- **Animal feed**
- **Oil and oilseeds**

Safety parameters and adulterants

For the quality assurance in the field the chemical analysis of safety parameters and adulterants the DRRR offers a variety of different parameter-matrix-combinations.

- **Mycotoxins**
- **Residues (e.g. pesticides)**
- **Allergens**
- **Contaminants (e.g. PAH, heavy metals, PFAS)**

Statistical evaluation

Take advantage of our statistical evaluation system. The evaluation of the proficiency testing is based on the highest scientific and statistical level. Therefore the participating laboratories have a very precise feedback on their actual performance.

Market-leading statistical evaluation

Laboratory Measurement

By using our market-leading statistical evaluation, additional information such as laboratory uncertainty and various scattering of each laboraotires can be presented.

Individual Proficiency testing

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

In addition to our standard programme, DRRR GmbH can organise customer-specific proficiency tests that are individually designed to your needs. Due to many years of experience in a wide range of testing and analytical areas, we are your contact for such queries.

Your customised proficiency test

Examples of customised proficiency tests carried out by DRRR:

- Qualification programmes for the automotive industry
- Qualification programmes for the textile industry
- Proficiency tests to verify methodological expertise in the area of consumer goods
- Group-wide proficiency tests to improve comparability in the area of consumer goods
- Qualification programmes in the area of food monitoring
- Association-specific proficiency tests for the fruit juice industry

Benefit from our high quality standards in all important fields of testing.

Your proficiency testing project is planned in close co-operation with the project partners. Depending on your requirements, all steps, from registration to report, can be taken over.

Statistical know-how, expertise and the established, customer-oriented processes of the DRRR ensure the successful organisation of your proficiency testing project.

Get in touch with us.

We look forward to working with you!

Proficiency testing - chemical-physical

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

Art. no.	Proficiency testing type [A]		Parameters [*]	Period	To view pricing information:
	Milk and cream				Login or register
2010007	**UHT milk 1**	☐	fat [g/100g], dry matter [g/100g], protein (N x 6,38) [g/100g], lactose (monohydrate) [g/100g], freezing point [m°C], density [g/ml] (all quantitative)	Apr-26	
2010366	**UHT milk 2**	☐	fat [g/100g], dry matter [g/100g], protein (N x 6,38) [g/100g], lactose (monohydrate) [g/100g], freezing point [m°C], density [g/ml], aw value [-] (all quantitative)	Sep-26	
2010107	**UHT milk (lactose free)**	☐	lactose (monohydrate) - enzymatic [g/100g], lactose (monohydrate) - chromatographic [g/100g] (all quantitative)	May-26	
2010015	**Raw milk 1**	☐	fat [g/100g], dry matter [g/100g], protein (N x 6,38) [g/100g], lactose (monohydrate) [g/100g], freezing point [m°C], pH value [-], casein [g/100g] (all quantitative)	Jan-26	
2010005	**Raw milk 2**	☐	fat [g/100g], dry matter [g/100g], protein (N x 6,38) [g/100g], lactose (monohydrate) [g/100g], freezing point [m°C], pH value [-], casein [g/100g] (all quantitative)	Jun-26	
2010370	**Raw milk 3**	☐	fat [g/100g], dry matter [g/100g], protein (N x 6,38) [g/100g], lactose (monohydrate) [g/100g], freezing point [m°C], casein [g/100g] (all quantitative)	Oct-26	
2010003	**Raw cream 1**	☐	fat [g/100g], dry matter [g/100g], protein (N x 6,38) [g/100g] (all quantitative)	Feb-26	
2010374	**Raw cream 2**	☐	fat [g/100g], dry matter [g/100g], protein (N x 6,38) [g/100g] (all quantitative)	Jul-26	
2010041	**Evaporated milk**	☐	fat [g/100g], dry matter [g/100g], protein (N x 6,38) [g/100g], ash [g/100g], phosphorus (P) [mg/100g] (all quantitative)	Jul-26	
2010624	**Buttermilk**	☐	phosphatides (calculated as lecithin) [mg/100g], fat [g/100g], dry matter [g/100g], ash [g/100g], pH value [-], acidity acc. Soxhlet-Henkel [SH], density in heat serum [g/ml] (all quantitative)	Apr-26	
2010702	**Dairy drinks**	☐	fat [g/100g], crude protein (N x 6,38) [g/100g], dry matter [g/100g], sucrose (anhydrous) [g/100g], glucose (anhydrous) [g/100g], lactose (monohydrate) [g/100g], fructose (anhydrous) [g/100g], total sugar (anhydrous) [g/100g] (all quantitative)	Dec-26	
2011117	**Pesticides in raw milk**	☐	identification of various pesticides (qual.), quantification of the identified pesticides [mg/kg] (quant.)	Nov-26	
	Milk products (other)				
2010852	**Whey concentrate**	☐	fat [g/100g], dry matter [g/100g], protein (N x 6,38) [g/100g], lactose (monohydrate) [g/100g], ash [g/100g] (all quantitative)	Jul-26	
2010009	**Butter**	☐	solids non fat [g/100g], moisture content [g/100g], hardness [N], chloride [mg/100g], cholesterol [mg/100g], pH value [-] (all quantitative)	Sep-26	
2010382	**Butter (fatty acid profile)**	☐	butyric acid [% / fat], caproic acid [% / fat], caprylic acid [% / fat], capric acid [% / fat], lauric acid [% / fat], myristic acid [% / fat], myristoleic acid [% / fat], myristelaidic acid [% / fat], palmicit acid [% / fat], palmitoleic acid [% / fat], palmitelaidic acid [% / fat], stearic acid [% / fat], linoleic acid [% / fat], linolenic acid [% / fat], gamma linolenic acid [% / fat], eicosatrienoic acid [% / fat], eicosatetraenoic acid [% / fat], eicosapentaenoic acid [% / fat] (all quantitative)	Sep-26	
2010017	**Yoghurt**	☐	fat [g/100g], dry matter [g/100g], protein (N x 6,38) [g/100g], pH value [-], total lactic acid [mg/100g] (all quantitative)	Nov-26	
2010087	**Pudding - dessert**	☐	fat [g/100g], dry matter [g/100g], protein (N x 6,38) [g/100g], lactose (monohydrate) [g/100g], pH value [-] (all quantitative)	Nov-26	
2010091	**AMF anhydrous milk fat**	☐	water content [g/100g], free fatty acids [g/100g], total β-carotene [mg/kg], butyric acid methyl ester [g/100g] (all quantitative)	Apr-26	
2010453	**Protein powder - amino acid profile**	☐	alanine (Ala) [g/100 g proteine], arginine (Arg) [g/100 g proteine], asparagine (Asn) [g/100 g proteine], aspartate (Asp) [g/100 g proteine], cysteine (Cys) [g/100 g proteine], glutamine (Gln) [g/100 g proteine], glutamate (Glu) [g/100 g proteine], glycine (Gly) [g/100 g proteine], histidine (His) [g/100 g proteine], isoleucine (Ile) [g/100 g proteine], leucine (Leu) [g/100 g proteine], lysine (Lys) [g/100 g proteine], methionine (Met) [g/100 g proteine], phenylalanine (Phe) [g/100 g proteine], proline (Pro) [g/100 g proteine], serine (Ser) [g/100 g proteine], Threonine (Thr) [g/100 g proteine], tryptophan (Trp) [g/100 g proteine], tyrosine (Tyr) [g/100 g proteine], valine (Val) [g/100 g proteine] (all quantitative)	Jun-26	
	Ice-cream				
3010012	**Ice cream (base mix)**	☐	total fat [g/100 g] (quant.), milk fat [g/100 g] (quant.), colouring agent cochenille red A [mg/kg] (quant.), lactose (monohydrate) [g/100 g] (quant.), vanillin [mg/kg] (quant.), vanillin acid [mg/kg] (quant.), p-hydroxybenzaldehyde [mg/kg] (quant.), p-hydroxybenzoic acid [mg/kg] (quant.), colouring agent curcumin [pos./neg.] (qual.), colouring agent β-carotene [pos./neg.] (qual.), colouring agent cochenille red A qual. [pos./neg.] (qual.), foreign fat (added fat) [pos./neg.] (qual.)	Sep-26	

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Proficiency testing - chemical-physical

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

Art. no.	Proficiency testing type [A]		Parameters [*]	Period	To view pricing information:
	Cheese				Login or register
2010378	**Processed cheese**	☐	fat [g/100g], dry matter [g/100g], protein (N x 6,38) [g/100g], total lactic acid [mg/100g], pH value [-], sodium chloride [g/100g], nitrate [mg/kg], citric acid (monydrate) [mg/100g], phosphorus [mg/100g], ash [g/100g], lactose (monohydrate) [g/100g] (all quantitative)	Sep-26	
2010029	**Fresh cheese**	☐	fat [g/100g], dry matter [g/100g], protein (N x 6,38) [g/100g], total lactic acid [mg/100g] (all quantitative)	Apr-26	
2010164	**Curd**	☐	fat [g/100g], dry matter [g/100g], protein ((N x 6,38) [g/100g], total lactic acid [mg/100g] (all quantitative)	Oct-26	
2010047	**Semi hard cheese**	☐	fat [g/100g], dry matter [g/100g], protein (N x 6,38) [g/100g], sodium chloride [g/100g], nitrate [mg/kg] (all quantitative)	May-26	
2010031	**Hard cheese**	☐	fat [g/100g], dry matter [g/100g], protein (N x 6,38) [g/100g], sodium chloride [g/100g] (all quantitative)	Apr-26	
2010037	**Soft cheese**	☐	fat [g/100g], dry matter [g/100g], protein (N x 6,38) [g/100g], sodium chloride [g/100g], pH value [-] (all quantitative)	May-26	
	Milk powder				
2010027	**Whole milk powder**	☐	fat [g/100 g], free fat [g/100 g], moisture content [g/100 g], crude protein (N x 6,38) [g/100 g], lactose (monohydrate) [g/100 g], ash [g/100 g], titratable acid [g/100 g], pH value [-] (all quantitative)	Apr-26	
2010001	**Skimmed milk powder**	☐	fat [g/100 g], moisture content [g/100 g], crude protein (N x 6,38) [g/100 g], lactose (monohydrate) [g/100 g], ash [g/100 g], titratable acid [g/100 g], pH value [-] (all quantitative)	Sep-26	
2010123	**Milk powder (lactose reduced)**	☐	lactose (monohydrate) - chromatographic [g/100 g], lactose (monohydrate) - enzymatic [g/100 g], moisture content [g/100 g] (all quantitative)	Dec-26	
2010113	**Milk powder nitrate - nitrite**	☐	nitrate [mg/kg], nitrite [mg/kg] (all quantitative)	Aug-26	
2010023	**Whey powder**	☐	fat [g/100 g], moisture content [g/100 g], crude protein (N x 6,38) [g/100 g], ash [g/100 g], lactose (monohydrate) [g/100 g], titratable acid [g/100 g], pH value [-] (all quantitative)	Mar-26	
2010245	**Mineral oil in cheese and milk powder**	☐	MOSH C10-C16 [mg/kg], MOSH C16-C20 [mg/kg], MOSH C20-C25 [mg/kg], MOSH C25-C35 [mg/kg], MOSH C35-C40 [mg/kg], MOSH C40-C50 [mg/kg], MOAH C10-C16 [mg/kg], MOAH C16-C25 [mg/kg], MOAH C25-C35 [mg/kg], MOAH C35-C50 [mg/kg], MOSH C10-C50 [mg/kg], MOAH C10-C50 [mg/kg] (all quantitative)	May-26	
	Egg products				
2010056	**Egg products**	☐	total lipids [g/100 g], crude protein (N x 6,25) [g/100 g], dry matter [g/100 g], pH value [-], cholesterol [mg/100 g], α-linolenic acid methyl ester [g/100 g total fatty acid methyl ester], eicosapentaenoic acid methyl ester [g/100 g total fatty acid methyl ester], docosahexaenoic acid methyl ester [g/100 g total fatty acid methyl ester], sodium chloride [g/100 g] (all quantitative)	Dec-26	
2010413	**Egg pasta**	☐	total fat [g/100 g], crude protein (N x 6,25) [g/100 g], dry matter [g/100 g], ash [g/100 g], sodium chloride [g/100 g], cholesterol [mg/100 g], total sterols [mg/100 g], egg content [g/100 g], fibre [g/100 g] (all quantitative)	Dec-26	
2010415	**Mayonnaise**	☐	total acid (pH 8.1) calculated as acetic acid [g/100 g], dry matter [g/100 g], total fat [g/100 g], cholesterol [mg/100 g], egg yolk content [g/100 g], sorbic acid [g/kg], benzoic acid [g/kg], sodium chloride [g/100 g], pH value [-] (all quantitative)	Apr-26	
2010155	**Egg powder**	☐	total lipids [g/100 g], ash [g/100 g], pH value [-], dry matter [g/100 g], sodium chloride [g/100 g], L-lactic acid [mg/kg], D-3-hydroxybutyric acid [mg/kg], crude protein (N x 6,25) [g/100 g] (all quantitative)	Nov-26	
2010129	**Residues in liquid egg**	☐	total fat [g/100 g], polychlorinated dibenzodioxins (PCDD) [pg/g fat], polychlorinated dibenzofuran (PCDF) [pg/g fat], total PCBs [pg/g fat] (all quantitative)	Dec-26	
2011120	**Nicotine in liquid egg**	☐	nicotine (CAS 54-11-5) [µg/kg], cotinine (CAS 486-56-6) [µg/kg] (all quantitative)	May-26	
2011128	**PFAS in liquid egg**	☐	total perfluorooctanesulfonic acid (CAS 1763-23-1) [µg/kg], total perfluorooctanoic acid (CAS 335-67-1) [µg/kg], total perfluorononanoic acid (CAS 375-95-1) [µg/kg], total perfluorohexane sulfonic acid (CAS 355-46-4) [µg/kg], total perfluorohexanoic acid (CAS 307-24-4) [µg/kg], total perfluorodecanoic acid (CAS 335-76-2) [µg/kg], total perfluorundecanoic acid (CAS 2058-94-8) [µg/kg], total perfluorododecanoic acid (CAS 307-55-1) [µg/kg], total perfluorotridecanoic acid (CAS 72629-94-8) [µg/kg], total perfluorotetradecanoic acid (CAS 376-06-7) [µg/kg], total perfluorobutane sulfonic acid (CAS 375-73-5) [µg/kg], total perfluorodecane sulfonic acid (CAS 335-77-3) [µg/kg], total perfluorooctanesulfonamide (CAS 754-91-6) [µg/kg] (all quantitative)	Aug-26	

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Proficiency testing - chemical-physical

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

Art. no.	Proficiency testing type [A]		Parameters [*]	Period	To view pricing information:
	Fruit & vegetables products - NEW!				Login or register
2011366	**Glutamic acid in tomato paste**	☐	L-glutamic acid [mg/kg] (all quantitative)	Nov-26	
2011367	**Element determination in the ultra-trace range**	☐	aluminium (Al) [µg/kg], barium (Ba) [µg/kg], cerium (Ce) [µg/kg], chromium (Cr) [µg/kg], copper (Cu) [µg/kg], dysprosium (Dy) [µg/kg], gadolinium (Gd) [µg/kg], lanthanum (La) [µg/kg], manganese (Mn) [µg/kg], molybdenum (Mo) [µg/kg], nickel (Ni) [µg/kg], neodymium (Nd) [µg/kg], lead (Pb) [µg/kg], praseodymium (Pr) [µg/kg], selenium (Se) [µg/kg], tin (Sn) [µg/kg], uranium (U) [µg/kg], vanadium (V) [µg/kg], ytterbium (Yb) [µg/kg], zinc (Zn) [µg/kg] (all quantitative)	Nov-26	
	Fruit & vegetables products				
2011282	**Bisphenols in tomato products**	☐	bisphenol A (CAS 80-05-7) [µg/kg], bisphenol B (CAS 77-40-7) [µg/kg], bisphenol F (CAS 620-92-8) [µg/kg], bisphenol S (CAS 80-09-1) [µg/kg], bisphenol AF (CAS 1478-61-1) [µg/kg] (all quantitative)	Jul-26	
2011285	**PFAS in vegetables**	☐	total perfluorooctanesulfonic acid (CAS 1763-23-1) [µg/kg], total perfluorooctanoic acid (CAS 335-67-1) [µg/kg], total perfluorononanoic acid (CAS 375-95-1) [µg/kg], total perfluorohexane sulfonic acid (CAS 355-46-4) [µg/kg], total perfluorohexanoic acid (CAS 307-24-4) [µg/kg], total perfluorodecanoic acid (CAS 335-76-2) [µg/kg], total perfluorundecanoic acid (CAS 2058-94-8) [µg/kg], total perfluorododecanoic acid (CAS 307-55-1) [µg/kg], total perfluorotridecanoic acid (CAS 72629-94-8) [µg/kg], total perfluorotetradecanoic acid (CAS 376-06-7) [µg/kg], total perfluorobutane sulfonic acid (CAS 375-73-5) [µg/kg], total perfluorodecane sulfonic acid (CAS 335-77-3) [µg/kg], total perfluorooctanesulfonamide (CAS 754-91-6) [µg/kg] (all quantitative)	Jun-26	
2010051	**Sugar mix (fruit preparation)**	☐	sucrose (anhydrous) [g/100 g], glucose (anhydrous) [g/100 g], fructose (anhydrous) [g/100 g], maltose (anhydrous) [g/100 g], starch [g/100 g], aspartame [ppm], acesulfam K [ppm], sorbate (as anion) [ppm], saccharin as free imide [ppm], total sugar (anhydrous) [g/100 g] (all quantitative)	Jul-26	
2010053	**Fruit preparation**	☐	brix value [°brix], pH value [-], total acid (pH 8.1) calculated as citric acid (anhydrous) [g/kg], L-malic acid [g/kg], ash [g/kg], phosphorus (P) [g/kg], potassium (K) [mg/100 g] (all quantitative)	Sep-26	
2010384	**Sauerkraut**	☐	total ascorbic acid (vitamin C) [mg/100 mL], total acid (pH 8.2) calculated as acetic acid [g/100 mL], non volatile acid (pH 8.2) calculated as acetic acid [g/100 mL], total lactic acid [mg/100 mL], pH value [-], sodium chloride [g/100 mL] (all quantitative)	Dec-26	
2010386	**Dried fruits**	☐	sulphur dioxide (SO2) [mg/kg], moisture content [g/100 g], total fat [g/100 g], glucose (anhydrous) [g/100 g], fructose (anhydrous) [g/100 g], sucrose (anhydrous) [g/100 g], total sugar (anhydrous) [g/100 g], fibre [g/100 g] (all quantitative)	Dec-26	
2010388	**Dry potato product**	☐	moisture content [g/100 g], total fat [g/100 g], saturated fatty acids [g/100 g], crude protein (N x 6,25) [g/100 g], ash [g/100 g], carbohydrates [g/100 g], starch [g/100 g], sucrose (anhydrous) [g/100 g], fibre [g/100 g], sodium (Na) [g/100 g] (all quantitative)	Dec-26	
2010390	**Tomato ketchup**	☐	pH value [-], total acid (pH 8.1) calculated as acetic acid [g/100 g], citric acid (anhydrous) [g/100 g], sodium chloride [g/100 g], glucose (anhydrous) [g/100 g], fructose (anhydrous) [g/100 g], soluble solids [g/100 g], dry matter [g/100 g], sorbic acid [g/kg], benzoic acid [g/kg], sucrose (anhydrous) [g/100 g], total sugar (anhydrous) [g/100 g] (all quantitative)	Jul-26	
2010704	**Hot sauce**	☐	capsaicin [ppm], dihydrocapsaicin [ppm], nordihydrocapsaicin [ppm], total capsaicinoids [ppm] (all quantitative)	Dec-26	
2011086	**Vegetable chips**	☐	total fat [g/100 g], crude protein (N x 6,25) [g/100 g], dry matter [g/100 g], ash [g/100 g], sodium chloride [g/100 g], acrylamide (CAS 79-06-1) [µg/kg] (all quantitative)	May-26	
2011088	**Pesticides in fruiting vegetables**	☐	identification of various pesticides (qual.), quantification of the identified pesticides [mg/kg] (quant.)	Sep-26	
2011089	**Pesticides in pome fruit**	☐	identification of various pesticides (qual.), quantification of the identified pesticides [mg/kg] (quant.)	Sep-26	
2011093	**Alternaria toxins in tomato products**	☐	alternariol (AOH) (CAS 641-38-3) [µg/kg], alternariol monomethyl ether (AME) (CAS 23452-05-3) [µg/kg], tenuazonic acid (TEA) (CAS 610-88-8) [µg/kg], tentoxin (TEN) (CAS 28540-82-1) [µg/kg] (all quantitative)	Nov-26	
2011097	**Acrylamide in potato products**	☐	acrylamide (CAS 79-06-1) [µg/kg] (all quantitative)	Dec-26	
2011111	**Pesticides in citrus fruit**	☐	identification of various pesticides (qual.), quantification of the identified pesticides [mg/kg] (quant.)	Sep-26	

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Proficiency testing - chemical-physical

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

Art. no.	Proficiency testing type [A]		Parameters [*]	Period	To view pricing information:
	Vegan und vegetarian substitutes				Login or register
2010165	**Plant drink (milk alternative)**	☐	fat [g/100 g], dry matter [g/100 g], crude protein (N x 6,38) [g/100 g], freezing point [m°C], density [g/ml] (all quantitative)	Nov-26	
2010502	**Quinolizidine alkaloids in Lupins Drink**	☐	lupinine (CAS 486-70-4) [mg/kg], cytisine (CAS 485-35-8) [mg/kg], sparteine (CAS 90-39-1) [mg/kg] (all quantitative)	Dec-26	
2010712	**Vegetarian sausage substitute**	☐	total fat [g/100 g], crude protein (N x 6,25) [g/100 g], dry matter [g/100 g], sodium chloride [g/100 g], ash [g/100 g], fibre [g/100 g], pH value [-] (all quantitative)	May-26	
2010343	**Vegetarian bread spread**	☐	total fat [g/100 g], crude protein (N x 6,25) [g/100 g], dry matter [g/100 g], sodium chloride [g/100 g], ash [g/100 g], pH value [-] (all quantitative)	Dec-26	
	Meat products - NEW!				
2011365	**Histological examination of meat and sausage**	☐	qualitative evidence of tissues and other components (all qualitative)	Jun-26	
	Meat products				
2011056	**Cooked sausage**	☐	total fat [g/100 g], crude protein (N x 6,25) [g/100 g], moisture content [g/100 g], ash [g/100 g], sodium chloride [g/100 g], pH value [-], aw value [-], hydroxyproline [g/100 g], sodium nitrate [mg/kg], sodium nitrite [mg/kg], starch [g/100 g], diphosphorus pentoxide (P2O5) [g/100 g], L-glutamic acid [mg/kg] (all quantitative)	Nov-26	
2010019	**Boiled sausage 1**	☐	total fat [g/100 g], moisture content [g/100 g], ash [g/100 g], crude protein (N x 6,25) [g/100 g], hydroxyproline [g/100 g], sodium chloride [g/100 g], sodium nitrate [mg/kg], sodium nitrite [mg/kg], diphosphorus pentoxide (P2O5) [g/100 g], calcium (Ca) [mg/kg], aw value [-], starch [g/100 g] (all quantitative)	Feb-26	
2010204	**Boiled sausage 2**	☐	non-protein nitrogen (NPN) x 6.25 [g/100 g], collagen decomposition products [g/100 g], L-glutamic acid [mg/kg], citric acid (anhydrous) [mg/kg], sodium acetate [mg/kg], L-lactate [mg/kg], sodium nitrate [mg/kg], sodium nitrite [mg/kg], total ascorbic acid (vitamin C) [mg/100 g], pH value [-] (all quantitative)	Sep-26	
2010214	**Raw sausage 1**	☐	aw value [-], pH value [-], D-lactic acid [mg/kg], L-lactic acid [mg/kg], sodium (Na) [mg/100 g], sodium nitrate [mg/kg], sodium nitrite [mg/kg], sorbic acid [mg/kg], saturated fatty acids [g/100 g Fett (fat)], monounsaturated fatty acids [g/100 g Fett (fat)], total fat [g/100 g] (all quantitative)	Jun-26	
2010419	**Raw sausage 2**	☐	sodium (Na) [mg/100 g], total fat [g/100 g], crude protein (N x 6,25) [g/100 g], moisture content [g/100 g], ash [g/100 g], sodium chloride [g/100 g], hydroxyproline [g/100 g], diphosphorus pentoxide (P2O5) [g/100 g], starch [g/100 g], solubilised milk protein [g/100 g] (all quantitative)	Jun-26	
2011284	**PFAS in meat**	☐	total perfluorooctanesulfonic acid (CAS 1763-23-1) [µg/kg], total perfluorooctanoic acid (CAS 335-67-1) [µg/kg], total perfluorononanoic acid (CAS 375-95-1) [µg/kg], total perfluorohexane sulfonic acid (CAS 355-46-4) [µg/kg], total perfluorohexanoic acid (CAS 307-24-4) [µg/kg], total perfluorodecanoic acid (CAS 335-76-2) [µg/kg], total perfluorundecanoic acid (CAS 2058-94-8) [µg/kg], total perfluorododecanoic acid (CAS 307-55-1) [µg/kg], total perfluorotridecanoic acid (CAS 72629-94-8) [µg/kg], total perfluorotetradecanoic acid (CAS 376-06-7) [µg/kg], total perfluorobutane sulfonic acid (CAS 375-73-5) [µg/kg], total perfluorodecane sulfonic acid (CAS 335-77-3) [µg/kg], total perfluorooctanesulfonamide (CAS 754-91-6) [µg/kg] (all quantitative)	Dec-26	
	Fish and seafood				
2010421	**Fish paste 1**	☐	moisture content [g/100 g], total fat [g/100 g], crude protein (N x 6,25) [g/100 g], ash [g/100 g], sodium chloride [g/100 g], arsenic (As) [µg/100 g], iodine (I) [µg/100 g] (all quantitative)	Dec-26	
2010423	**Fish paste 2**	☐	total fat [g/100 g], sorbic acid [mg/100 g], benzoic acid [mg/100 g], saccharin as free imide [mg/100 g], cyclamate [mg/100 g], citric acid (anhydrous) [mg/100 g] (all quantitative)	Dec-26	
2011116	**Pesticides in fish, seafood**	☐	identification of various pesticides (qual.), quantification of the identified pesticides [mg/kg] (quant.)	Nov-26	
2011125	**PFAS in fish**	☐	total perfluorooctanesulfonic acid (CAS 1763-23-1) [µg/kg], total perfluorooctanoic acid (CAS 335-67-1) [µg/kg], total perfluorononanoic acid (CAS 375-95-1) [µg/kg], total perfluorohexane sulfonic acid (CAS 355-46-4) [µg/kg] (all quantitative)	Apr-26	

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Proficiency testing - chemical-physical

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

Art. no.	Proficiency testing type [A]		Parameters [*]	Period	To view pricing information:
	Nonalcoholic beverages - NEW!				Login or register
2011364	**Fruit juice**	☐	brix value [°brix], relative density (20 °C/20 °C) [-], pH value [-], total acid (pH 8.1) calculated as citric acid (anhydrous) [g/l], glucose (anhydrous) [g/l], fructose (anhydrous) [g/l], sucrose (anhydrous) [g/l], L-malic acid [g/l], L-ascorbic acid [mg/l], total lactic acid [mg/l], formol number [ml 0.1 N NaOH/100ml] (all quantitative)	Nov-26	
	Nonalcoholic beverages				
2010392	**Coffee**	☐	water content [g/100 g], ash [g/100 g], pH value [-], acid content (acidity) at pH 6,00 [mmol/kg], acid content (acidity) at pH 7,00 [mmol/kg], acid content (acidity) at pH 8,00 [mmol/kg], water soluble extract [g/100 g], caffeine [g/100 g], acrylamide (CAS 79-06-1) [µg/kg], chlorogenic acid [g/100 g] (all quantitative)	Oct-26	
2010915	**Green coffee**	☐	percent mass loss [%] (all quantitative)	May-26	
2010394	**Tea**	☐	dry matter [g/100 g], ash [g/100 g dry matter], water soluble ash [g/100 g dry matter], water soluble extract [g/100 g dry matter], caffeine [g/100 g dry matter], theobromine [mg/100 g dry matter], theophylline [mg/100 g dry matter], acid-insoluble ash [g/100 g dry matter] (all quantitative)	Oct-26	
2010396	**Energy drink**	☐	pH value [-], taurine [mg/l], caffeine [mg/l], inosit [mg/l], glucuronolactone [mg/l], sucrose (anhydrous) [g/l], glucose (anhydrous) [g/l], fructose (anhydrous) [g/l], total sugar (anhydrous) [g/l], total acid (pH 8.1) calculated as tartaric acid [g/l], relative density (20 °C/20 °C) [-], absorption of light at a wavelength of 400 nm [-], absorption of light at a wavelength of 460 nm [-], absorption of light at a wavelength of 520 nm [-], absorption of light at a wavelength of 630 nm [-], CO2 content [g/l], dissolved oxygen [ppm] (all quantitative)	Oct-26	
2010021	**Vitamin solution**	☐	thiamine (vitamin B1) as thiamine chloride [mg/100 ml], riboflavine (vitamin B2) as total vitamin B2 [mg/100 ml], niacin (vitamin B3) [mg/100 ml], pantothenic acid (vitamin B5) [mg/100 ml], pyridoxine (vitamin B6) [mg/100 ml], folic acid (vitamin B11) [µg/100 ml], cyanocobalamin (vitamin B12) [µg/100 ml], L-ascorbic acid [mg/100 ml], α-tocopherol (vitamin E) [mg/100 ml], riboflavin [mg/100 ml], flavin mononucleotide [mg/100 ml], total ascorbic acid (vitamin C) [mg/100 ml], dehydroascorbic acid [mg/100 ml] (all quantitative)	May-26	
2010402	**Carrot juice**	☐	relative density (20 °C/20 °C) [-], pH value [-], total acid (pH 8.1) calculated as tartaric acid [g/l], sucrose (anhydrous) [g/l], fructose (anhydrous) [g/l], glucose (anhydrous) [g/l], nitrate [mg/l], total β-carotene [mg/100 g], α-carotene [mg/100 g], total carotenes [mg/100 g], total sugar (anhydrous) [g/l] (all quantitative)	Oct-26	
2010600	**Fruit juice concentrate**	☐	brix value [°brix], pH value [-], titratable acidity (pH 8.1) [mmol H+/kg], citric acid (anhydrous) [g/kg], total D-isocitric acid [mg/kg], L-malic acid [g/kg], total lactic acid [g/kg], L-ascorbic acid [mg/100 g], dehydroascorbic acid [mg/100 g], total ascorbic acid [mg/100 g], hesperidin [mg/kg], glucose (anhydrous) [g/kg], fructose (anhydrous) [g/kg], sucrose (anhydrous) [g/kg], total sugar (anhydrous) [g/kg], potassium (K) [mg/kg], calcium (Ca) [mg/kg], magnesium (Mg) [mg/kg], sodium (Na) [mg/kg] (all quantitative)	Jul-26	
2011020	**Apple juice**	☐	patulin (CAS 149-29-1) [µg/l] (all quantitative)	Jun-26	
2010617	**Carbonated soft drinks - quinine**	☐	quinine (CAS 130-95-0) [mg/l] (all quantitative)	May-26	
2010055	**Grape juice**	☐	sulphur dioxide (SO2) [mg/l] (all quantitative)	Jun-26	
2010127	**Currant juice**	☐	lead (Pb) [mg/kg], cadmium (Cd) [mg/kg], arsenic (As) [mg/kg], copper (Cu) [mg/kg], zinc (Zn) [mg/kg], iron (Fe) [mg/kg], tin (Sn) [mg/kg], mercury (Hg) [mg/kg], aluminium (Al) [mg/kg], nickel (Ni) [mg/kg] (all quantitative)	Aug-26	
2010154	**Tomato juice**	☐	total ergosterol [mg/l] (all quantitative)	Nov-26	
2010359	**Sugar substitutes in food**	☐	Isomalt (sum of GPS and GPM) (anhydrous) [g/100 ml], Lactitol (anhydrous) [g/100 ml], Maltitol (anhydrous) [g/100 ml], Mannitol (anhydrous) [g/100 ml], Sorbitol (anhydrous) [g/100 ml], Xylitol (anhydrous) [g/100 ml] (all quantitative)	Aug-26	
2010943	**Solvent residues in food**	☐	methanol (CAS 67-56-1) [mg/kg], acetone (CAS 67-64-1) [mg/kg], n-hexane (CAS 110-54-3) [mg/kg], dichloromethane (CAS 75-09-2) [mg/kg], methyl acetate (CAS 79-20-9) [mg/kg], isopropyl (CAS 67-63-0) [mg/kg], benzene (CAS 71-43-2) [mg/kg] (all quantitative)	Dec-26	
2011279	**Colourants in food**	☐	identification of various food colourants (qual.), quantification of the identified food colourants [mg/l] (quant.)	Jul-26	
	Alcoholic beverages				
2010133	**Beer**	☐	apparent extract [g/100 g], real extract [g/100 g], alcohol by weight [g/100 g], alcohol by volume [ml/100 ml], original wort [g/100 g], relative density (20 °C/20 °C) [-], bitterness units [IBU], pH value [-] (all quantitative)	Jul-26	

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Proficiency testing - chemical-physical

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

Art. no.	Proficiency testing type [A]		Parameters [*]	Period	To view pricing information:
					Login or register
Cereals, cereal products - NEW!					
2011361	**Detection of foreign objects in food (filth test)**	☐	quant. determination of mineral matter [% (w/w)], quant. determination of insect residues [% (w/w)], quant. determination of rodent hairs [% (w/w)], quant. determination of feather fragments [% (w/w)] (all quantitative)	Nov-26	
Cereals, cereal products					
2010069	**Pastries**	☐	total fat [g/100 g], crude protein (N x 6,25) [g/100 g], dry matter [g/100 g], ash [g/100 g], milk fat [g/100 g], sucrose (anhydrous) [g/100 g], starch [g/100 g], propionic acid [mg/kg] (all quantitative)	Nov-26	
2010427	**Flour**	☐	moisture content [g/100 g], crude protein (N x 5,7) [g/100 g], ash [g/100 g], starch [g/100 g], wet gluten [g/100 g], falling number [s], total acid (pH 8.5) calculated as lactic acid [g/100 g] (all quantitative)	Sep-26	
2010431	**Butter biscuit**	☐	ash [g/100 g], dry matter [g/100 g], crude protein (N x 6,25) [g/100 g], total fat [g/100 g], semimicro butyric acid number [-], free butyric acid [g/100 g fat], butyric acid methyl ester [g/100 g fat], milk fat [g/100 g], starch [g/100 g], cholesterol [mg/100 g], sucrose (anhydrous) [g/100 g], fibre [g/100 g] (all quantitative)	Dec-26	
2010955	**Antioxidants in food**	☐	BHA (CAS 25013-16-5) [mg/kg], BHT (CAS 128-37-0) [mg/kg], Ethoxyquin (CAS 91-53-2) [mg/kg] (all quantitative)	Sep-26	
2011114	**Pesticides in cereals**	☐	identification of various pesticides (qual.), quantification of the identified pesticides [mg/kg] (quant.)	Nov-26	
2011214	**PAHs in grain**	☐	benzo[a]pyrene (CAS 50-32-8) [µg/kg], benzo[a]anthracene (CAS 56-55-3) [µg/kg], chrysene (CAS 218-01-9) [µg/kg], benzo[b]fluoranthene (CAS 205-99-2) [µg/kg], sum of PAHs [µg/kg] (all quantitative)	Sep-26	
2010180	**Mineral oil in low-fat and starch-rich foodstuff**	☐	MOSH C10-C16 [mg/kg], MOSH C16-C20 [mg/kg], MOSH C20-C25 [mg/kg], MOSH C25-C35 [mg/kg], MOSH C35-C40 [mg/kg], MOSH C40-C50 [mg/kg], MOAH C10-C16 [mg/kg], MOAH C16-C25 [mg/kg], MOAH C25-C35 [mg/kg], MOAH C35-C50 [mg/kg], MOSH C10-C50 [mg/kg], MOAH C10-C50 [mg/kg] (all quantitative)	May-26	
2011217	**Visual determination of insects in flour**	☐	quant. determination of insect residues [% (w/w)] (quant.), number of whole insects [number/kg] (quant.), qualitative detection of insects [-] (qual.)	Sep-26	
Infant formula					
2011283	**MCPD and glycidol in infant milk formula**	☐	3-MCPD (sum of 3-MCPD and 3-MCPD fatty acid esters) [µg/kg], glycidyl fatty acid esters, expressed as glycidol [µg/kg] (all quantitative)	Sep-26	
2010441	**Baby porridge powder**	☐	thiamine (vitamin B1) as thiamine chloride [mg/100 g], riboflavine (vitamin B2) as total vitamin B2 [mg/100 g], pyridoxine (vitamin B6) [mg/100 g], cyanocobalamin (vitamin B12) [µg/100 g], retinol (vitamin A) as all-E-retinol [mg/100 g], L-ascorbic acid [mg/100 g], α-tocopherol (vitamin E) [mg/100 g], folic acid (vitamin B11) [µg/100 g], pantothenic acid (vitamin B5) [mg/100 g], biotin (vitamin B7) [µg/100 g], total ascorbic acid (vitamin C) [mg/100 g] (all quantitative)	Jul-26	
2010447	**Milk powder IMF part 1**	☐	fat [g/100g], crude protein (N x 6,25) [g/100g], ash [g/100g], moisture content [g/100g], retinol (vitamin A) as all-E-retinol [µg/100g], total ascorbic acid (vitamin C) [mg/100g] (all quantitative)	Aug-26	
2010449	**Milk powder IMF part 2**	☐	sodium (Na) [mg/100g], potassium (K) [mg/100g], calcium (Ca) [mg/100g], magnesium (Mg) [mg/100g], phosphorus (P) [mg/100g], iron (Fe) [mg/100g], copper (Cu) [µg/100g], zinc (Zn) [mg/100g], manganese (Mn) [µg/100g] (all quantitative)	Aug-26	
2010957	**Bisphenols in infant food**	☐	bisphenol A (CAS 80-05-7) [µg/kg], bisphenol B (CAS 77-40-7) [µg/kg], bisphenol F (CAS 620-92-8) [µg/kg], bisphenol S (CAS 80-09-1) [µg/kg] (all quantitative)	Oct-26	
2011126	**PFAS in baby food**	☐	total perfluorooctanesulfonic acid (CAS 1763-23-1) [ng/kg], total perfluorooctanoic acid (CAS 335-67-1) [ng/kg], total perfluorononanoic acid (CAS 375-95-1) [ng/kg], total perfluorohexane sulfonic acid (CAS 355-46-4) [ng/kg] (all quantitative)	May-26	

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Proficiency testing - chemical-physical

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

Art. no.	Proficiency testing type [A]		Parameters [*]	Period	To view pricing information:
	Declaration nutrition values				Login or register
2010451	**Declaration nutrition values with 2 different food stuff**	☐	energy value [kJ/100 g], protein [g/100 g], carbohydrate [g/100 g], sugar [g/100 g], fat [g/100 g], saturated fatty acids [g/100 g], fibre [g/100 g], salt [g/100 g] (all quantitative)	Sep-26	
	Food matrices (other) - NEW!				
2011359	**Sudan dyes in spices**	☐	identification of sudan dyes (all qualitative)	Dec-26	
2011360	**Melatonin in dietary supplements**	☐	melatonin (CAS 73-31-4) [mg/kg] (all quantitative)	Dec-26	
	Food matrices (other)				
2010459	**Mustard**	☐	dry matter [g/ 100 g], total acid (pH 8.1) calculated as acetic acid [g/ 100 g], sodium chloride [g/100 g], allyl isothiocyanate [mg/100 g], sulfur dioxide (SO_2) [mg/kg], total fat [g/100 g] (all quantitative)	Dec-26	
2010327	**Sugar free candies**	☐	glucose (anhydrous) [g/100 g], fructose (anhydrous) [g/100 g], sucrose (anhydrous) [g/100 g], water content [g/100 g] (all quantitative)	Dec-26	
2010347	**Pyrrolizidine alkaloids in spices and tea**	☐	Screening for at least 9 different pyrrolizidine alkaloids, e.g. monocrotaline, heliotrine, retrorsine (all quantitative)	Oct-26	
2010349	**Nicotine replacement products**	☐	nicotine (CAS 54-11-5) [mg/g] (all quantitative)	Aug-26	
2010498	**Metals in tobacco**	☐	lead (Pb) [mg/kg], cadmium (Cd) [mg/kg], arsenic (As) [mg/kg], copper (Cu) [mg/kg], zinc (Zn) [mg/kg], iron (Fe) [mg/kg], mercury (Hg) [mg/kg], aluminium (Al) [mg/kg], nickel (Ni) [mg/kg] (all quantitative)	Aug-26	
2011087	**Peanut butter**	☐	dry matter [g/100 g], ash [g/100 g], total fat [g/100 g], crude protein (N x 6,25) [g/100 g], pH value [g/100 g], sodium chloride [g/100 g], total sugar (anhydrous) [g/100 g], fibre [g/100 g] (all quantitative)	Dec-26	
2011160	**PAHs in herbs and spices**	☐	benzo[a]pyrene (CAS 50-32-8) [µg/kg], benzo[a]anthracene (CAS 56-55-3) [µg/kg], benzo[b]fluoranthene (CAS 205-99-2) [µg/kg], chrysene (CAS 218-01-9) [µg/kg], sum PAK [µg/kg] (all quantitative)	May-26	
2010197	**Delicatessen salad**	☐	benzoic acid [mg/kg], sorbic acid [mg/kg], Methyl 4-hydroxybenzoate [mg/kg], Ethyl 4-hydroxybenzoate [mg/kg], Propyl 4-hydroxybenzoate [mg/kg], Butyl 4-hydroxybenzoate [mg/kg], n-Butyl 4-hydroxybenzoate [mg/kg], Isobutyl 4-hydroxybenzoate [mg/kg] (all quantitative)	Dec-26	
	Animal feed				
2010315	**Fluoride content in animal feed**	☐	fluoride [mg/kg] (all quantitative)	Nov-26	
2010351	**Metals in animal feed**	☐	copper (Cu) [mg/kg], zinc (Zn) [mg/kg], iron (Fe) [mg/kg], calcium (Ca) [mg/kg], phosphorus (P) [mg/kg], potassium (K) [mg/kg], manganese (Mn) [mg/kg], magnesium (Mg) [mg/kg], sodium (Na) [mg/kg] (all quantitative)	Aug-26	
2010353	**Ingredients animal feed (round 1)**	☐	moisture content [g/100 g], crude protein (N x 6,25) [g/100 g], crude oil [g/100 g], crude ash [g/100 g], crude fiber [g/100 g], total sugar (anhydrous) [g/100 g], lactose (monohydrate) [g/100 g], starch [g/100 g], ash (insoluble in hydrochloric acid) [g/100 g], calcium carbonate [g/100 g] (all quantitative)	Aug-26	
2011166	**Ingredients animal feed (round 2)**	☐	crude protein (N x 6,25) [g/100 g], urea [g/100 g], volatile nitrogenous bases [g/100 g], amino acid content [g/kg], tryptophan (Trp) [g/100 g], phosphorus (P) [g/100 g], sodium chloride [g/100 g], retinol (vitamin A) as all-E-retinol [mg/kg], α-tocopherol (vitamin E) [mg/kg] (all quantitative)	Aug-26	
2011140	**PFAS in feed**	☐	total perfluorooctanesulfonic acid (CAS 1763-23-1) [µg/kg dry matter], total perfluorooctanoic acid (CAS 335-67-1) [µg/kg dry matter], total perfluorononanoic acid (CAS 375-95-1) [µg/kg dry matter], total perfluorohexane sulfonic acid (CAS 355-46-4) [µg/kg dry matter], total perfluorohexanoic acid (CAS 307-24-4) [µg/kg dry matter], total perfluorodecanoic acid (CAS 335-76-2) [µg/kg dry matter], total perfluorundecanoic acid (CAS 2058-94-8) [µg/kg dry matter], total perfluorododecanoic acid (CAS 307-55-1) [µg/kg dry matter], total perfluorotridecanoic acid (CAS 72629-94-8) [µg/kg dry matter], total perfluorotetradecanoic acid (CAS 376-06-7) [µg/kg dry matter], total perfluorobutane sulfonic acid (CAS 375-73-5) [µg/kg dry matter], total perfluorodecane sulfonic acid (CAS 335-77-3) [µg/kg dry matter], total perfluorooctanesulfonamide (CAS 754-91-6) [µg/kg dry matter] (all quantitative)	Nov-26	

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Proficiency testing - chemical-physical

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

Art. no.	Proficiency testing type [A]		Parameters [*]	Period	To view pricing information:
	Honey and beeswax				Login or register
2010455	**Honey**	☐	diastase number acc. to Schade [-], proline [mg/kg], hydroxymethylfurfural (CAS 67-47-0) [mg/kg], electrical conductivity [mS/cm], moisture [g/100 g], glycerin [mg/kg], ethanol (CAS 64-17-5) [mg/kg], pH value [-] (all quantitative)	Aug-26	
2011004	**Pesticide residues in honey**	☐	τ-fluvalinate (CAS 102851-06-9) [µg/kg], DEET (CAS 134-62-3) [µg/kg], piperonylbutoxide (CAS 51-03-6) [µg/kg], malathion (CAS 121-75-5) [µg/kg], chlorpyrifos (CAS 2921-88-2) [µg/kg] (all quantitative)	Nov-26	
2011006	**Pyrrolizidine alkaloids in honey**	☐	Screening for at least 9 different pyrrolizidine alkaloids, e.g. monocrotaline, heliotrine, retrorsine (all quantitative)	Jun-26	
2011012	**Relative frequency of pollen in honey**	☐	Relative pollen frequency [%] (all quantitative)	Dec-26	
2011014	**Falsification honey**	☐	identification of rice syrup, identification of sugar beet syrup (all quantitative)	Jul-26	
2011018	**Falsification beeswax**	☐	paraffin wax [g/100 g], stearic acid [g/100 g] (all quantitative)	Dec-26	
	Cocoa and chocolate				
2010025	**Chocolate**	☐	total fat [g/100 g], milk fat [g/100 g], crude protein (N x 6,25) [g/100 g], water content [g/100 g], lactose (monohydrate) [g/100 g], sucrose (anhydrous) [g/100 g], theobromine [mg/100 g], caffeine [mg/100 g], dry matter [g/100 g], acrylamide (CAS 79-06-1) [µg/kg] (all quantitative)	Feb-26	
2010249	**Pesticides in chocolate**	☐	Malathion (CAS 121-75-5) [mg/kg], chlorpyrifos (CAS 2921-88-2) [mg/kg], metalaxyl (CAS 57837-19-1) [mg/kg], glyphosate (CAS 1071-83-6) [mg/kg] (all quantitative)	Oct-26	
2010337	**Metals in cocoa and chocolate**	☐	lead (Pb) [mg/kg], cadmium (Cd) [mg/kg], arsenic (As) [mg/kg], copper (Cu) [mg/kg], zinc (Zn) [mg/kg], iron (Fe) [mg/kg], mercury (Hg) [mg/kg], aluminium (Al) [mg/kg], nickel (Ni) [mg/kg] (all quantitative)	Oct-26	
2010590	**Mineral oil in cocoa butter and chocolate**	☐	MOSH C10-C16 [mg/kg], MOSH C16-C20 [mg/kg], MOSH C20-C25 [mg/kg], MOSH C25-C35 [mg/kg], MOSH C35-C40 [mg/kg], MOSH C40-C50 [mg/kg], MOAH C10-C16 [mg/kg], MOAH C16-C25 [mg/kg], MOAH C25-C35 [mg/kg], MOAH C35-C50 [mg/kg], MOSH C10-C50 [mg/kg], MOAH C10-C50 [mg/kg] (all quantitative)	Jul-26	

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Proficiency testing - chemical-physical

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Art. no.	Proficiency testing type [A]		Parameters [*]	Period	To view pricing information:
	Fats, oils and oilseeds - NEW!				Login or register
2011362	**Vitamins in edible oils**	☐	retinol (vitamin A) as all-E-retinol [µg/100 g], total vitamin D [µg/100 g], α-tocopherol (vitamin E) [mg/100 g], vitamin K1 [µg/100 g] (all quantitative)	Sep-26	
2011363	**Mineral oil in oil seeds**	☐	MOSH C10-C16 [mg/kg], MOSH C16-C20 [mg/kg], MOSH C20-C25 [mg/kg], MOSH C25-C35 [mg/kg], MOSH C35-C40 [mg/kg], MOSH C40-C50 [mg/kg], MOAH C10-C16 [mg/kg], MOAH C16-C25 [mg/kg], MOAH C25-C35 [mg/kg], MOAH C35-C50 [mg/kg], MOSH C10-C50 [mg/kg], MOAH C10-C50 [mg/kg] (all quantitative)	Sep-26	
	Fats, oils and oilseeds				
2011281	**Edible oils - trace elements**	☐	phosphorus (P) [mg/kg], sodium (Na) [mg/kg], calcium (Ca) [mg/kg], magnesium (Mg) [mg/kg], iron (Fe) [mg/kg], copper (Cu) [mg/kg] (all quantitative)	Jun-26	
2011118	**Pesticides in hemp seeds**	☐	Identification of various pesticides (qual.), Quantification of the identified pesticides [mg/kg] (quant.)	Oct-26	
2010457	**Edible fat - fatty acid profile**	☐	fatty acid C 14:0 [g/100 g total fatty acids], fatty acid C 16:0 [g/100 g total fatty acids], fatty acid C 16:1 [g/100 g total fatty acids], fatty acid C 17:0 [g/100 g total fatty acids], fatty acid C 17:1 [g/100 g total fatty acids], fatty acid C 18:0 [g/100 g total fatty acids], fatty acid C 18:1 [g/100 g total fatty acids], fatty acid C 18:2 [g/100 g total fatty acids], fatty acid C 18:3 [g/100 g total fatty acids], fatty acid C 20:0 [g/100 g total fatty acids], fatty acid C 20:1 [g/100 g total fatty acids], fatty acid C 20:2 [g/100 g total fatty acids], fatty acid C 22:0 [g/100 g total fatty acids], fatty acid C 22:1 [g/100 g total fatty acids], fatty acid C 22:2 [g/100 g total fatty acids], fatty acid C 24:0 [g/100 g total fatty acids], fatty acid C 24:1 [g/100 g total fatty acids], Sum of the trans-fatty acids (TFA) [g/100 g total fatty acids] (all quantitative)	Oct-26	
2010710	**Edible fat**	☐	iodine value [g iodine / 100 g fat], acid value [mg KOH/g fat], peroxide value [mEq active oxygen/kg], saponification value [mg KOH/g fat], free fatty acids [mg/100 g], p-anisidine value [AV], Refractive Index [nD], water content [g/100 g] (all quantitative)	Oct-26	
2010157	**PAHs in animal and vegetable fats and oils**	☐	benzo[a]pyrene (CAS 50-32-8) [µg/kg], benzo[a]anthracene (CAS 56-55-3) [µg/kg], chrysene (CAS 218-01-9) [µg/kg], benzo[b]fluoranthene (CAS 205-99-2) [µg/kg], sum of PAHs [µg/kg] (all quantitative)	Oct-26	
2010500	**MCPD and glycidol in edible oil**	☐	3-MCPD (sum of 3-MCPD and 3-MCPD fatty acid esters) [µg/kg], glycidyl fatty acid esters, expressed as glycidol [µg/kg] (all quantitative)	Nov-26	
2010941	**Cannabinoids in hemp seeds**	☐	Cannabidiol (CBD) (CAS 13956-29-1) [mg/kg], Delta-9-tetrahydrocannabinol (d9-THC) (CAS 1972-08-03) [mg/kg] (all quantitative)	Jun-26	
2010959	**Phthalates in edible oil**	☐	DINP (CAS 28553-12-0) [mg/kg], DEHP (CAS 117-81-7) [mg/kg], DNOP (CAS 117-84-0) [mg/kg], DIDP (CAS 26761-40-0) [mg/kg], BBP (CAS 85-68-7) [mg/kg], DBP (CAS 84-74-2) [mg/kg], DIBP (CAS 84-69-5) [mg/kg], DPP (CAS 131-18-0) [mg/kg], DIHP (CAS 71888-89-6) [mg/kg], DMEP (CAS 117-82-8) [mg/kg] (all quantitative)	Oct-26	
2011092	**Alternaria toxins in vegetable oils**	☐	alternariol (AOH) (CAS 641-38-3) [µg/kg], alternariol monomethyl ether (AME) (CAS 23452-05-3) [µg/kg], tenuazonic acid (TEA) (CAS 610-88-8) [µg/kg], tentoxin (TEN) (CAS 28540-82-1) [µg/kg] (all quantitative)	Nov-26	
2011094	**Pesticides in oilseeds**	☐	identification of various pesticides (qual.), quantification of the identified pesticides [mg/kg] (quant.)	Oct-26	
2010320	**Mineral oil in edible fats**	☐	MOSH C10-C16 [mg/kg], MOSH C16-C20 [mg/kg], MOSH C20-C25 [mg/kg], MOSH C25-C35 [mg/kg], MOSH C35-C40 [mg/kg], MOSH C40-C50 [mg/kg], MOAH C10-C16 [mg/kg], MOAH C16-C25 [mg/kg], MOAH C25-C35 [mg/kg], MOAH C35-C50 [mg/kg], MOSH C10-C50 [mg/kg], MOAH C10-C50 [mg/kg] (all quantitative)	Jul-26	
2011135	**Mineral oil in edible oils**	☐	MOSH C10-C16 [mg/kg], MOSH C16-C20 [mg/kg], MOSH C20-C25 [mg/kg], MOSH C25-C35 [mg/kg], MOSH C35-C40 [mg/kg], MOSH C40-C50 [mg/kg], MOAH C10-C16 [mg/kg], MOAH C16-C25 [mg/kg], MOAH C25-C35 [mg/kg], MOAH C35-C50 [mg/kg], MOSH C10-C50 [mg/kg], MOAH C10-C50 [mg/kg] (all quantitative)	Dec-26	
2011150	**MOAH - quantification acc. number of aromatic rings**	☐	Monoaromatic MOAH [mg/kg], Diaromatic MOAH [mg/kg], Tri/Polyaromatic MOAH [mg/kg], MOAH C10-C50 [mg/kg], Total Terpenes and/or other natural interferences [mg/kg], PP PO(S)H [mg/kg], PE PO(S)H [mg/kg], Polyalphaolefins (PAO) [mg/kg], MOSH C10-C50 [mg/kg], Total Hydrocarbons (MOSH Fraction) [mg/kg], MOAH C10-C50 (LC-GC-FID) [mg/kg], MOSH C10-C50 (LC-GC-FID) [mg/kg] (all quantitative)	Sep-26	
2011280	**Hydrocyanic acid in linseed**	☐	hydrocyanic acid [mg/kg] (all quantitative)	Jun-26	

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Proficiency testing - organoleptic

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Art. no.	Proficiency testing type [A]		Parameters [*]	Period	To view pricing information:
	Nonalcoholic beverages				Login or register
3010000	**Water (ranking test, basic tastes) 1**	☐	organoleptic testing - basic taste (2 basic tastes)	Feb-26	
3010028	**Water (ranking test, basic tastes) 2**	☐	organoleptic testing - basic taste (2 basic tastes)	Jun-26	
3010030	**Water (ranking test, basic tastes) 3**	☐	organoleptic testing - basic taste (2 basic tastes)	Nov-26	
3010006	**Water (triangle test, basic taste)**	☐	organoleptic testing - triangle test basic taste	Jul-26	
3010055	**Fruit juice (threshold value examination, flavour taint)**	☐	threshold value	Dec-26	
3010032	**Fruit juice (triangle test, flavour taint)**	☐	organoleptic testing - triangle test flavour	Sep-26	
3010008	**Drinking water (TON, TFN) (minimum number of participants: 3 assessors)**	☐	threshold odour number (TON), threshold flavour number (TFN)	Mar-26	
3010010	**Apple juice (triangle test, basic taste)**	☐	organoleptic testing - triangle test basic taste	Jun-26	
3010016	**Coffee infusion (triangle test, flavour taint)**	☐	organoleptic testing - triangle test flavour	Jul-26	
3010029	**Plant drink (triangle test, flavour taint)**	☐	organoleptic testing - triangle test flavour	May-26	
	Alcoholic beverages				
3010020	**Beer (triangle test, Diacetyl)**	☐	organoleptic testing - diacetyl	Oct-26	
	Meat products				
3010018	**Sausage (simple descriptive testing)**	☐	Visual (Appearance), Olfactory (Smell/Odour), Gustatory (Taste/Flavour), Texture/Consistency/Mouthfeel	Jul-26	
	Animal feed - NEW!				
3010033	**Animal feed (simple descriptive testing)**	☐	Visual (Appearance), Olfactory (Smell/Odour), Texture	Sep-26	

possible basic tastes	**sweet, sour, bitter, salty**
possible flavours (except flavour taint)	**strawberry, cherry, vanilla, peach, lemon**

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Proficiency testing - organoleptic

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Art. no.	Proficiency testing type [A]		Parameters [*]	Period	To view pricing information:
	Food stuff (other)				Login or register
3010049	**Chocolate (simple descriptive testing)**	☐	Visual (Appearance), Olfactory (Smell/Odour), Gustatory (Taste/Flavour), Texture/Consistency/Mouthfeel	May-26	
3010051	**Chocolate (profile testing)**	☐	visual: brightness of the brown color (light - dark) [cm], olfactory: cocoa odour (little - much) [cm], gustatory: cocoa flavour (little - much) [cm], gustatory: sweetness (very sweet - little sweet) [cm], gustatory: bitterness (little bitter - very bitter) [cm], texture: hardness (low degree of hardness - high degree of hardness) [cm], mouthfeel: melting quality (fast melting - slow melting) [cm], mouthfeel: adstringency (little - much) [cm]	Nov-26	
3010004	**Tuna (triangle test)**	☐	organoleptic testing - triangle test	Jun-26	
3010054	**Texture test (triangle test)**	☐	organoleptic testing - triangle test	Apr-26	
3010007	**Colour check (triangle test)**	☐	organoleptic testing - triangle test	Apr-26	
	Milk products (other)				
3010037	**Yoghurt (ranking test, basic tastes)**	☐	organoleptic testing - basic taste (2 basic tastes)	Nov-26	
3010039	**Yoghurt (triangle test, basic taste)**	☐	organoleptic testing - triangle test basic taste	Nov-26	
3010041	**Yoghurt (ranking test, flavours)**	☐	organoleptic testing - flavour (2 flavours)	Nov-26	
3010043	**Yoghurt (triangle test, flavour)**	☐	organoleptic testing - triangle test flavour	Nov-26	
3010013	**Milk (triangle test, flavour taint)**	☐	organoleptic testing - triangle test flavour	Apr-26	

possible basic tastes	**sweet, sour, bitter, salty**
possible flavours (except flavour taint)	**strawberry, cherry, vanilla, peach, lemon**

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Proficiency testing - immunological, molecular biological & microbiological

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

Art. no.	Proficiency testing type [A]		Parameters [*]	risk group	Period	To view pricing information:
						Login or register
Milk and cream - NEW!						
2011339	**Enumeration of somatic cells in milk**	☐	somatic cells [cells/ml] (all quantitative)		Jul-26	
Milk and cream						
2011314	**Detection B.cereus milk**	☐	B.cereus qualitative [-] (all qualitative)	**risk group 2**	May-26	
2010013	**Enumeration of E. coli in milk 1**	☐	E.coli [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	May-26	
2010463	**Enumeration of E. coli in milk 2**	☐	E.coli [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	Nov-26	
2010033	**Enumeration of enterobacteriaceae in milk 1**	☐	Enterobacteriaceae [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	May-26	
2010465	**Enumeration of Enterobacteriaceae in milk 2**	☐	Enterobacteriaceae [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	Nov-26	
2010089	**Detection of Campylobacter spp. in milk**	☐	Campylobacter spp. (all qualitative)	**risk group 2**	May-26	
2010467	**Enumeration of aerobic spores in milk**	☐	aerobic spores [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	May-26	
2010608	**EHEC-STEC Screening milk**	☐	EHEC-STEC Screening (all qualitative)	**risk group 3 ****	Jul-26	
2010612	**Total count in milk**	☐	aerobic total count [cfu/g] (all quantitative)	**risk group 1**	May-26	
2010924	**Enumeration of yeasts in milk**	☐	yeasts [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	Aug-26	
2010045	**Milk (residues)**	☐	Chloramphenicol (CAS 56-75-7) [µg/kg], PCB 101 (CAS 37680-73-2) [(mg/kg) fat], trichlormethane (CAS 67-66-3) [mg/kg], aflatoxin M1 [µg/kg], Streptomycin (CAS 57-92-1) [µg/l], tetracycline (CAS 60-54-8) [µg/kg] (all quantitative)		Apr-26	
2010951	**Inhibitors in milk**	☐	Tetracycline (CAS 60-54-8) [µg/kg], Amoxicillin (CAS 26787-78-0) [µg/kg], Ceftriaxone (CAS 73384-59-5) [µg/kg], Ciprofloxacin (CAS 85721-33-1) [µg/kg] (all quantitative)		Dec-26	
Milk products (other)						
2010317	**Enumeration of characteristic microorganisms in yoghurt**	☐	Lactobacillus bulgaricus [cfu/g], Streptococcus thermophilus [cfu/g] (all quantitative)	**risk group 1**	May-26	
Cheese						
2010111	**Enumeration of E. coli in cheese**	☐	E.coli [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	Jul-26	
2010176	**Enumeration of yeasts in cheese**	☐	yeasts [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	May-26	
2010178	**Enumeration of moulds in cheese**	☐	moulds [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	May-26	
2010137	**Detection of Listeria in cheese**	☐	L. monocytogenes qualitative (all qualitative)	**risk group 2**	Aug-26	
2010469	**Enumeration of coagulase-pos. staphylococcus in cheese**	☐	coagulase-positive Staphylococcus [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 2**	Jul-26	
2010471	**Enumeration of enterobacteriaceae in cheese**	☐	Enterobacteriaceae [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	Jul-26	
2010156	**Enumeration of B. cereus in cheese**	☐	B.cereus [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 2**	May-26	
2010258	**Processed cheese (natamycin, aflatoxin)**	☐	natamycin (CAS 7681-93-8) [mg/kg], aflatoxin M1 [µg/kg] (all quantitative)		Dec-26	
Ice-cream						
2010548	**Enumeration of enterobacteriaceae in ice cream**	☐	Enterobacteriaceae [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	Jul-26	
2010550	**Detection of Salmonella spp. in ice cream**	☐	Salmonella spp. (all qualitative)	**risk group 2**	Jul-26	
2010552	**Enumeration of E. coli in ice cream**	☐	E.coli [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	Jul-26	
2010554	**Enumeration of L. monocytogenes in ice cream**	☐	L. monocytogenes qualitative (all qualitative)	**risk group 2**	Jul-26	

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Proficiency testing - immunological, molecular biological & microbiological

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Art. no.	Proficiency testing type [A]		Parameters [*]	risk group	Period	To view pricing information:
	Milk powder					Login or register
2010160	**Enumeration of coliform bacteria in milk powder**	☐	Coliforms [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	May-26	
2010063	**Enumeration of yeasts in milk powder 1**	☐	yeasts [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	Jan-26	
2010473	**Enumeration of yeasts in milk powder 2**	☐	yeasts [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	Sep-26	
2010065	**Enumeration of moulds in milk powder 1**	☐	moulds [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	Feb-26	
2010475	**Enumeration of moulds in milk powder 2**	☐	moulds [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	Nov-26	
2010477	**Enumeration of Enterobacteriaceae in milk powder**	☐	Enterobacteriaceae [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	Jan-26	
2010479	**Enumeration of E. coli in milk powder**	☐	E.coli [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	Jan-26	
2010481	**Enumeration of lactic acid bacteria in milk powder**	☐	lactobacilli (microaerophilic) [cfu/g], aerobic total count [cfu/g], lactobacilli (aerobic) [cfu/g] (all quantitative)	**risk group 1**	Nov-26	
2010483	**Detection of Shigella spp. in milk powder**	☐	Shigella spp. (all qualitative)	**risk group 2**	May-26	
2010095	**Enumeration of enterococci in milk powder**	☐	Enterococcus [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	Mar-26	
2010057	**Enumeration of clostridia in milk powder**	☐	sulfite-reducing Clostridia (vegetative) [cfu/g], anaerobic total count [cfu/g], anaerobic, mesophilic , sulfite-reducing spores [cfu/g], C.perfringens [cfu/g] (all quantitative)	**risk group 2**	Jun-26	
2010109	**Enumeration of B. cereus in milk powder**	☐	B.cereus [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 2**	May-26	
2010081	**Detection of Cronobacter spp. in milk powder**	☐	Cronobacter spp. (all qualitative)	**risk group 2**	Mar-26	
2010148	**Detection of Salmonella spp. in milk powder 1**	☐	Salmonella spp. (all qualitative)	**risk group 2**	Mar-26	
2010485	**Detection of Salmonella spp. in milk powder 2**	☐	Salmonella spp. (all qualitative)	**risk group 2**	Nov-26	
2010083	**Enumeration of coagulase-pos. staphylococcus in milk powder**	☐	coagulase-positive Staphylococcus [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 2**	Mar-26	
2010059	**Enumeration and detection of Listeria in milk powder 1**	☐	L. monocytogenes [cfu/g] (quant.), aerobic total count [cfu/g] (quant.), L. monocytogenes qualitative (qual.)	**risk group 2**	Jan-26	
2010153	**Enumeration and detection of Listeria in milk powder 2**	☐	L. monocytogenes [cfu/g] (quant.), aerobic total count [cfu/g] (quant.), L. monocytogenes qualitative (qual.)	**risk group 2**	Aug-26	
2010534	**Enumeration of thermophilic bacteria (55°C) in milk powder**	☐	thermophilic aerobic total count (55°C, vegetative) [cfu/g], thermoresistent spores of aerobic, thermophilic bacteria [cfu/g] (all quantitative)	**risk group 1**	Sep-26	
2010930	**Detection of coagulase-pos. staphylococcus in milk powder**	☐	coagulase-positive Staphylococcus qualitative (all qualitative)	**risk group 2**	Mar-26	
2010934	**Enumeration of anaerobic mesophilic spores in milk powder**	☐	anaerobic mesophilic spores [cfu/g], anaerobic total count [cfu/g] (all quantitative)	**risk group 2**	Sep-26	
2010938	**Detection of Pseudomonas spp. in milk powder**	☐	Pseudomonas spp. qualitative (all qualitative)	**risk group 2**	Jun-26	
2010940	**Detection of clostridia in milk powder**	☐	Clostridia spp. (all qualitative)	**risk group 2**	Jun-26	
2011162	**Aflatoxin M1 in milk powder**	☐	aflatoxin M1 [µg/kg] (all quantitative)		Oct-26	

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Proficiency testing - immunological, molecular biological & microbiological

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Art. no.	Proficiency testing type [A]		Parameters [*]	risk group	Period	To view pricing information:
	Meat products					Login or register
2011313	**Enumeration of Campylobacter spp. in poultry**	☐	Campylobacter spp. quantitative [CFU/g] (all quantitative)	**risk group 2**	May-26	
2010035	**Enumeration of E. coli in ground meat 1**	☐	E.coli [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	Feb-26	
2010499	**Enumeration of E. coli in ground meat 2**	☐	E.coli [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	Nov-26	
2010039	**Enumeration of enterocateriaceae in ground meat 1**	☐	Enterobacteriaceae [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	Feb-26	
2010501	**Enumeration of Enterobacteriaceae in ground meat 2**	☐	Enterobacteriaceae [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	Nov-26	
2010142	**Enumeration of coagulase-pos. staphylococcus in ground meat**	☐	coagulase-positive Staphylococcus [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 2**	Mar-26	
2010140	**Detection of Salmonella spp. in ground meat 1**	☐	Salmonella spp. (all qualitative)	**risk group 2**	Mar-26	
2010503	**Detection of Salmonella spp. in ground meat 2**	☐	Salmonella spp. (all qualitative)	**risk group 2**	Nov-26	
2010174	**Enumeration of Pseudomonas spp. in ground meat**	☐	Pseudomonas spp. [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 2**	Jun-26	
2010151	**Detection of Listeria in ground meat 1**	☐	L. monocytogenes qualitative (all qualitative)	**risk group 2**	Mar-26	
2010505	**Detection of Listeria in ground meat 2**	☐	L. monocytogenes qualitative (all qualitative)	**risk group 2**	Aug-26	
2010507	**Enumeration of Listeria in ground meat**	☐	L. monocytogenes [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 2**	Aug-26	
2010212	**Enumeration of lactic acid bacteria in ground meat**	☐	lactobacilli (aerobic) [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	Mar-26	
2010146	**Detection of Campylobacter spp. in poultry**	☐	Campylobacter spp. (all qualitative)	**risk group 2**	May-26	
2010936	**Enumeration of coliform bacteria in ground meat**	☐	Coliforms [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	Aug-26	
2010942	**Enumeration of clostridia in ground meat**	☐	sulfite-reducing Clostridia (vegetative) [cfu/g], anaerobic total count [cfu/g], anaerobic, mesophilic , sulfite-reducing spores [cfu/g], C.perfringens [cfu/g] (all quantitative)	**risk group 2**	Jun-26	
2010945	**Allergens in meat products**	☐	egg [mg/kg], peanut [mg/kg], walnut [mg/kg], celery [mg/kg], mustard [mg/kg] (all quantitative)		Jul-26	
2010263	**Beef, pork, horse**	☐	identification of species (qual.), relative amount beef [%] (quant.), relative amount pork [%] (quant.), relative amount horse [%] (quant.)		Dec-26	
	Simulated microbiological evaluation					
2011198	**Simulated evaluation aerobic total count**	☐	colony enumeration aerobic total count [CFU] (quant.), calculation of microbial load [-] (qual.)		Jul-26	
2011199	**Simulated evaluation aerobic spore-forming bacteria**	☐	colony enumeration aerobic spore-forming bacteria [CFU] (quant.), calculation of microbial load [-] (qual.)		Jul-26	
2011200	**Simulated evaluation yeasts**	☐	colony enumeration yeasts [CFU] (quant.), calculation of microbial load [-] (qual.)		Jul-26	
2011201	**Simulated evaluation mould**	☐	colony enumeration moulds [CFU] (quant.), calculation of microbial load [-] (qual.)		Jul-26	
2011202	**Simulated evaluation lactic acid bacteria**	☐	colony enumeration lactic acid bacteria [CFU] (quant.), calculation of microbial load [-] (qual.)		Jul-26	
2011203	**Simulated evaluation Sulfite-reducing clostridia**	☐	colony enumeration Sulfite-reducing clostridia [CFU] (quant.), calculation of microbial load [-] (qual.)		Jul-26	
2011204	**Simulated evaluation E.coli and Coliforms**	☐	colony enumeration E.coli [CFU] (quant.), colony enumeration Coliforms [CFU] (quant.), calculation of microbial load [-] (qual.)		Jul-26	

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Art. no.	Proficiency testing type [A]		Parameters [*]	risk group	Period	To view pricing information:
						Login or register
Egg products						
2010495	**Enumeration of Enterobacteriaceae in egg products**	☐	Enterobacteriaceae [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	Dec-26	
2010530	**Detection of Salmonella spp. in egg products**	☐	Salmonella spp. (all qualitative)	**risk group 2**	Dec-26	
2010532	**Enumeration of E. coli in egg products**	☐	E.coli [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	Dec-26	
2010706	**Antibiotics in liquid egg**	☐	Chloramphenicol (CAS 56-75-7) [µg/kg], Tetracycline (CAS 60-54-8) [µg/kg], Sulfadimidine (CAS 57-68-1) [µg/kg], Nitrofurantoin (CAS 67-20-9) [µg/kg] (all quantitative)		May-26	
Fish & seafood						
2010509	**Fish and seafood - detection Yersinia enterocolitica**	☐	Yersinia enterocolitica (all qualitative)	**risk group 2**	May-26	
2010540	**Fish and seafood - detection of Salmonella spp.**	☐	Salmonella spp. (all qualitative)	**risk group 2**	May-26	
Infant formula						
2010182	**Enumeration of bifidobacteria in infant food**	☐	Bifidobacteria [cfu/g] (all quantitative)	**risk group 1**	Jul-26	
2010261	**Milk powder IMF allergens**	☐	gliadin [mg/kg], lactose (monohydrate) [mg/100g], ß-lacto-globulin [mg/kg], soy protein [mg/kg], casein [mg/kg] (all quantitative)		Oct-26	
Food matrices (other) - NEW!						
2011340	**Microbial count by flow cytometry**	☐	number of living, bacteria cells [cells/ml] (all quantitative)	**risk group 1**	Jul-26	
2011341	**Biochemical confirmation procedures in microbiology**	☐	Gram stain [positive/negative], Oxidase test [positive/negative], Katalase test [positive/negative] (all qualitative)	**risk group 1**	Jul-26	
	These are proficiency tests that focus purely on testing techniques. A test simulant is used as the matrix.					
2011343	**Ready to eat meals - enumeration of Coliform bacteria**	☐	Coliforms [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	Sep-26	
2011344	**Ready to eat meals - enumeration coagulase pos. Staphylococcus**	☐	coagulase pos. Staphylococcus [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 2**	Sep-26	
2010536	**Enumeration of osmophilic yeasts in sweets**	☐	osmophilic yeasts [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	Apr-26	
2010538	**Enumeration of osmophilic moulds in sweets**	☐	osmophilic moulds [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	Apr-26	
Food matrices (other)						
2010513	**Ready-to-eat meals - detection of Listeria**	☐	L. monocytogenes qualitative (all qualitative)	**risk group 2**	Aug-26	
2010515	**Detection of Salmonella spp. in spices**	☐	Salmonella spp. (all qualitative)	**risk group 2**	Dec-26	
2010313	**Porcine DNA in Candy**	☐	identification of the animal species pork (all quantitative)		Dec-26	
2010588	**Porcine and beef DNA in gelatine**	☐	identification of the animal species pork, identification of the animal species beef (all quantitative)		Dec-26	
2011090	**Aflatoxins in nuts**	☐	aflatoxin B1 [µg/kg], aflatoxin B2 [µg/kg], aflatoxin G1 [µg/kg], aflatoxin G2 [µg/kg], total aflatoxin content [µg/kg] (all quantitative)		Oct-26	
2011091	**Aflatoxins in spices**	☐	aflatoxin B1 [µg/kg], aflatoxin B2 [µg/kg], aflatoxin G1 [µg/kg], aflatoxin G2 [µg/kg], total aflatoxin content [µg/kg] (all quantitative)		Dec-26	
Animal feed						
2011306	**Detection of Listeria spp. in animal feed**	☐	Listeria spp. qualitative (all qualitative)	**risk group 2**	Dec-26	
2010188	**Enumeration von Clostridia in animal feed**	☐	sulfite-reducing Clostridia (vegetative) [cfu/g], lactobacilli (anaerobic) [cfu/g], anaerobic mesophilic sulfite-reducing spores [cfu/g], anaerobic mesophilic total spores (nonselective) [cfu/g] (all quantitative)	**risk group 2**	Aug-26	
2010519	**Detection of Salmonella spp. in animal feed**	☐	Salmonella spp. (all qualitative)	**risk group 2**	Dec-26	
2011163	**Animal feed (GMO)**	☐	Quantitative detection of transgenic plants (construct or event-specific methods possible) [%], Qualitative detection of various screening elements (all quantitative)		Nov-26	

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Proficiency testing - immunological, molecular biological & microbiological

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

Art. no.	Proficiency testing type [A]		Parameters [*]	risk group	Period	To view pricing information:
						Login or register
Fruit & vegetables products						
2010043	**Enumeration and detection of yeasts in fruit preparation**	☐	yeasts [cfu/g] (quant.), yeasts qualitative (qual.)	**risk group 1**	Aug-26	
2010101	**Enumeration and detection of moulds in fruit preparation**	☐	moulds [cfu/g] (quant.), moulds qualitative (qual.)	**risk group 1**	Aug-26	
2010487	**Detection of Listeria in vegetables**	☐	L. monocytogenes qualitative (all qualitative)	**risk group 2**	Aug-26	
2010489	**Enumeration of Listeria in vegetables**	☐	L. monocytogenes [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 2**	Aug-26	
2010563	**Enumeration of yeasts in fruits**	☐	yeasts [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	Apr-26	
2010565	**Enumeration of moulds in fruits**	☐	moulds [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	Apr-26	
Nonalcoholic beverages						
2010097	**Enumeration of E. coli in fruit juice**	☐	E.coli [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	Apr-26	
2010199	**Spoiling organisms in fruit juice concentrate & compounds 1**	☐	spoiling organism quantitative [cfu/g] (quant.), aerobic total count [cfu/g] (quant.), spoiling organism qualitative (qual.)	**risk group 1**	Apr-26	
2010491	**Spoiling organisms in fruit juice concentrate & compounds 2**	☐	spoiling organism quantitative [cfu/g] (quant.), aerobic total count [cfu/g] (quant.), spoiling organism qualitative (qual.)	**risk group 1**	Nov-26	
2010493	**Alicyclobacillus spp. fruit juice concentrate**	☐	Alicyclobacillus spp. (all qualitative)	**risk group 1**	Oct-26	
2010592	**Enumeration of yeasts in fruit juice concentrate**	☐	yeasts [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	Apr-26	
2010594	**Enumeration of moulds in fruit juice concentrate**	☐	moulds [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	Apr-26	
2010596	**Enumeration of lactic acid bacteria in fruit juice**	☐	lactic acid bacteria (aerobic) [cfu/g], aerobic total count [cfu/g] (all quantitative)	**risk group 1**	Apr-26	
Alcoholic beverages - NEW!						
2011345	**Enumeration & identification of beer specific microorganisms**	☐	yeasts (quant.), lactic acid bacteria (quant.), aerobic total count (quant.), identification (qual.)	**risk group 1**	Aug-26	
Alcoholic beverages						
2010275	**Detection of Dekkera bruxellensis in wine**	☐	Dekkera bruxellensis qualitative (all qualitative)	**risk group 1**	Aug-26	
2011142	**Detection of Dekkera bruxellensis in beer**	☐	Dekkera bruxellensis qualitative (all qualitative)	**risk group 1**	Aug-26	
Performance testing culture media						
2011336	**Performance testing solid culture media – productivity (EN ISO 11133)**	☐	productivity [cfu] (all quantitative)	**risk group 1**	Sep-26	

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Proficiency testing - immunological, molecular biological & microbiological

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

Art. no.	Proficiency testing type [A]		Parameters [*]	risk group	Period	To view pricing information:
						Login or register
Mineral water and table water						
2010674	**Aerobic total count mineral water and table water**	☐	aerobic total count 37°C [KbE/ml], aerobic total count 20°C [KbE/ml] (all quantitative)		Apr-26	
2010676	**Detection fecal streptococci in mineral- and table water**	☐	streptococci (faecal) qualitative (all qualitative)		Oct-26	
2010680	**Detection Ps. aeruginosa in mineral- and table water**	☐	Ps.aeruginosa qualitative (all qualitative)		Oct-26	
2010952	**Sulfite-reducing, spore-forming anaerobes mineral water**	☐	sulfite-reducing, spore-forming anaerobes qualitative (all qualitative)		Aug-26	
2010134	**Detection coliform bacteria in mineral- and table water**	☐	Coliforms qualitative (all qualitative)		Oct-26	
2010138	**Detection E. coli in mineral- and table water**	☐	E.coli qualitative (all qualitative)		Oct-26	
Cereals, cereal products - NEW!						
2011342	**Detection of B. cereus and B. cereus toxin in cooked rice**	☐	B.cereus qualitative, B.cereus toxin qualitative (all qualitative)		May-26	
Cereals, cereal products						
2011167	**Mycotoxins in corn**	☐	aflatoxin B1 [µg/kg], aflatoxin B2 [µg/kg], aflatoxin G1 [µg/kg], aflatoxin G2 [µg/kg], ochratoxin A [µg/kg], deoxynivalenol (DON) [µg/kg], fumonisin B1 [µg/kg], zearalenone [µg/kg], total aflatoxin content [µg/kg] (all quantitative)		Nov-26	
2010141	**Corn (GMO)**	☐	detection of screening elements P-35S, T-NOS and pat, relative amount Bt-11 [%], relative amount MON810 [%] (all quantitative)		Nov-26	
2010143	**Rice (GMO)**	☐	detection of screening elements P-35S, T-NOS and bar, relative amount LLRice62 [%] (all quantitative)		Nov-26	
2010429	**Gluten**	☐	gluten [mg/kg] (all quantitative)		Nov-26	
2011108	**Qualitative detection of insects in flour**	☐	identification of the animal species Tenebrio molitor (all quantitative)		Nov-26	
Fats, oils and oilseeds						
2010720	**Soy (GMO)**	☐	Detection of screening elements P-35S, T-NOS and P-FMV, relative amount GTS 40-3-2 [%], relative amount MON 89788 [%] (all quantitative)		Nov-26	
2010145	**Canola (GMO)**	☐	Detection of screening elements T-NOS, CTP2-CP4EPSPS and P-FMV, relative amount 73496 [%], relative amount GT73 [%] (all quantitative)		Dec-26	
Honey and beeswax						
2011002	**Antibiotics in honey**	☐	chloramphenicol (CAS 56-75-7) [µg/kg], streptomycin (CAS 57-92-1) [µg/kg], sulfadimidine (CAS 57-68-1) [µg/kg], tetracycline (CAS 60-54-8) [µg/kg] (all quantitative)		Jun-26	
2011010	**GMOs in honey**	☐	detection of screening elements P-35S, T-NOS and P-FMV (all quantitative)		Jul-26	
Cocoa and chocolate						
2010247	**Aflatoxins in chocolate**	☐	aflatoxin B1 [µg/kg], aflatoxin B2 [µg/kg], aflatoxin G1 [µg/kg], aflatoxin G2 [µg/kg], total aflatoxin content [µg/kg] (all quantitative)		Sep-26	
2010144	**Detection of Salmonella spp. in chocolate**	☐	Salmonella spp. (all qualitative)		Mar-26	
Vegan and vegetarian substitutes						
2011165	**Identification of plant based food**	☐	identification soy, identification beans, identification lentils (all quantitative)		Oct-26	
2011164	**Vegan food identification (ISO 23662)**	☐	identification of vegan foods (all quantitative)		Oct-26	

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registration form proficiency testing

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

Additional samples are required for the following tests:

Quantity	Art. No. / Proficiency testing type

For questions and suggestions do not hesitate to contact the DRRR-team!

+49(0)831/960 878-0

info@DRRR.de

For proficiency testing schemes labelled with "risk group 2, or 3" we need a permission or an exemption for working with pathogenic microorganisms of your lab if existing in your country (e.g. "infection protection law (IfSG)" in Germany).**

In very rare individual cases an accredited proficiency testing round will not be carried out within the scope of accreditation due to technical or organizational reasons. In these rare cases the DRRR will inform the participants before the start of the proficiency testing round, thus before the sample shipment. An immediately free cancellation for the participants is possible until the date of the sample shipment.

Your registration is an one-time order. It is only valid for one year. Cancelation fees apply when cancelling a registration. If you want to have a permanent-registration please tick the box on the right side.

- ☐ This registration is permanent-registration and valid until my cancelation
- ☐ An offer with the total costs is needed
- ☐ A Purchase order from the purchasing department will follow

Order by e-mail: **info@DRRR.de**

Hereby we confirm obligatorily the participation in the above mentioned test(s) and the order for the additional sample sets.

	DRRR-customer number
	company
	additional line
	contact person
	street
	post code / city
	country
	email
	VAT-ID (EU)

Date:

Deutsches Referenzbüro
für Ringversuche und Referenzmaterialien GmbH
Reinhartser Straße 31 | 87437 Kempten
Tel.: +49 (0)8 31/960 878-0 | Fax: +49 (0)8 31/960 878-99
www.DRRR.de | info@DRRR.de

reference material

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

Importance

Reference material is a substance or item with one or more defined (known) characteristics and sufficient homogeneity.

Description reference material

Reference solution Enterobacteriaceae

These materials are suitable for the calibration of equipment, for the quality assurance of testing methods or to analyse derivate reference materials. DRRR-Reference materials are essential for the chemical, physical, microbiological and sensory analytics as well as for the quality assurance. Standards for the accreditation of testing and calibration laboratories demand the using of reference materials. The use of reference materials (RM) and certified reference materials (CRM) is an important procedure to avoid mistakes in the lab routine.

Profit with our high quality standards for your lab work

Characteristics

- the reference value is developed by the total number of results of the participants of proficiency testing (consensus value)
- DRRR-Reference materials do always refer to a DRRR-Proficiency testing
- reliable reference values according to advanced statistical evaluation
- independent service without influence of societies organisations and federations

The opportunity to collaborate with the best laboratories for the different requirements assures the high quality of our materials.

Reference materials meet all requirements of the ISO Guides 31 and 35, but it does not exist any accreditation for reference materials.

Identification

The reference materials listed on the following pages have specific article numbers to identify the materials. To supply our customers with consistently high quality the DRRR-reference materials will be replaced regularly by corresponding materials during the year. Currently available reference materials and its corresponding reference values will be sent on request. We reserve our right to send you always the latest materials.

Availability and order request of reference material

long-term calibration material (LKM)

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

STANDARON®

Eine Marke der DRRR GmbH und der LUFA Nord-West

The brand STANDARON®

The DRRR has concluded a far reaching cooperation with the IfL. The main focus of this cooperation is the development and commercialisation of long term calibration materials for the food economy. The developed materials were merchandised with the name **STANDARON®** .

STANDARON® long-term calibration materials (LKM) for raw milk, raw cream and pasteurised milk will be used for the calibration of IR instruments.

Reference system for raw milk analysis

With the cooperation arises a range of services that offers not only regional but also national both in North and South Germany a competent reference system for raw milk analysis. Therewith it also offers more advantages and reliabilities for our international customers. The cooperation could already prove its competence at the new introduced STANDARON® raw cream materials. The quality advantage of the materials has been clearly confirmed at linearity, precision and stability. Besides standard materials is a focus of the cooperation to produce tailor-made, customer-oriented materials which are specially designed to cover individual production processes.

The reference values of STANDARON® materials were defined by selected "reference laboratories". These laboratories are proved the requirements according to DIN EN ISO/IEC 17025:2017.

Questions about the application

If you need any advice to assure your calibration do not hesitate to contact us.

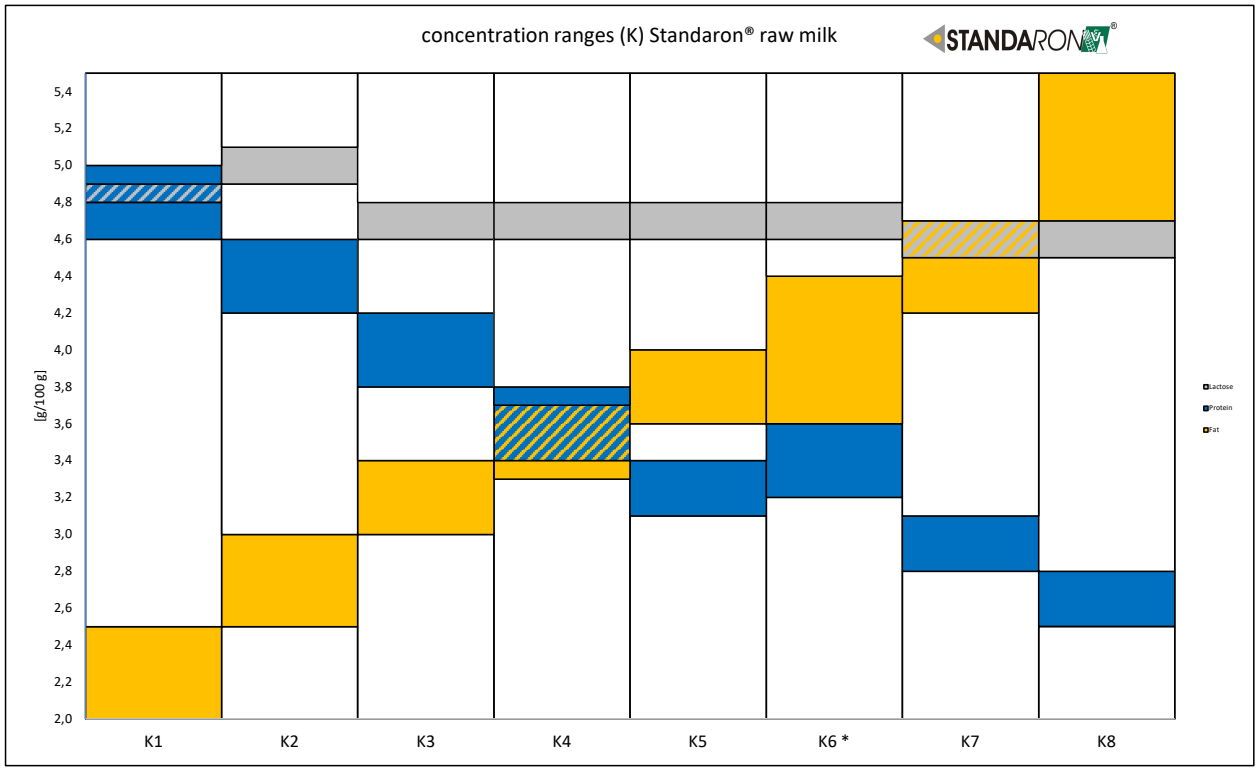
Application of the materials

STANDARON® - overview raw milk

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

LKM-type	Art. No.	fat	protein	lactose	dry matter	freezing point	urea	packaging unit	prices
		Röse-Gottlieb	*Kjeldahl*	*enzym.*	*102 °C*	*cryoscopy*	*enzym.*		
		g/100g	g/100g	g/100g	g/100g	m°C	mg/kg		
LKM RO K1	1141021	**2,0 - 2,5 %**	**4,6 - 5,0 %**	**4,8 - 4,9 %**	**available reference material and the corresponding reference values are available on request**			**50 ml**	20 €
LKM RO K2	1141022	**2,5 - 3,0 %**	**4,2 - 4,6 %**	**4,9 - 5,1 %**					
LKM RO K3	1141023	**3,0 - 3,4 %**	**3,8 - 4,2 %**	**4,6 - 4,8 %**					
LKM RO K4	1141024	**3,3 - 3,7 %**	**3,4 - 3,8 %**	**4,6 - 4,8 %**					
LKM RO K5	1141025	**3,6 - 4,0 %**	**3,1 - 3,4 %**	**4,6 - 4,8 %**					
LKM RO K6 *	1141026	**3,6 - 4,4 %**	**3,2 - 3,6 %**	**4,6 - 4,8 %**					
LKM RO K7	1141027	**4,2 - 4,7 %**	**2,8 - 3,1 %**	**4,5 - 4,7 %**					
LKM RO K8	1141028	**4,7 - 5,5 %**	**2,5 - 2,8 %**	**4,5 - 4,7 %**					

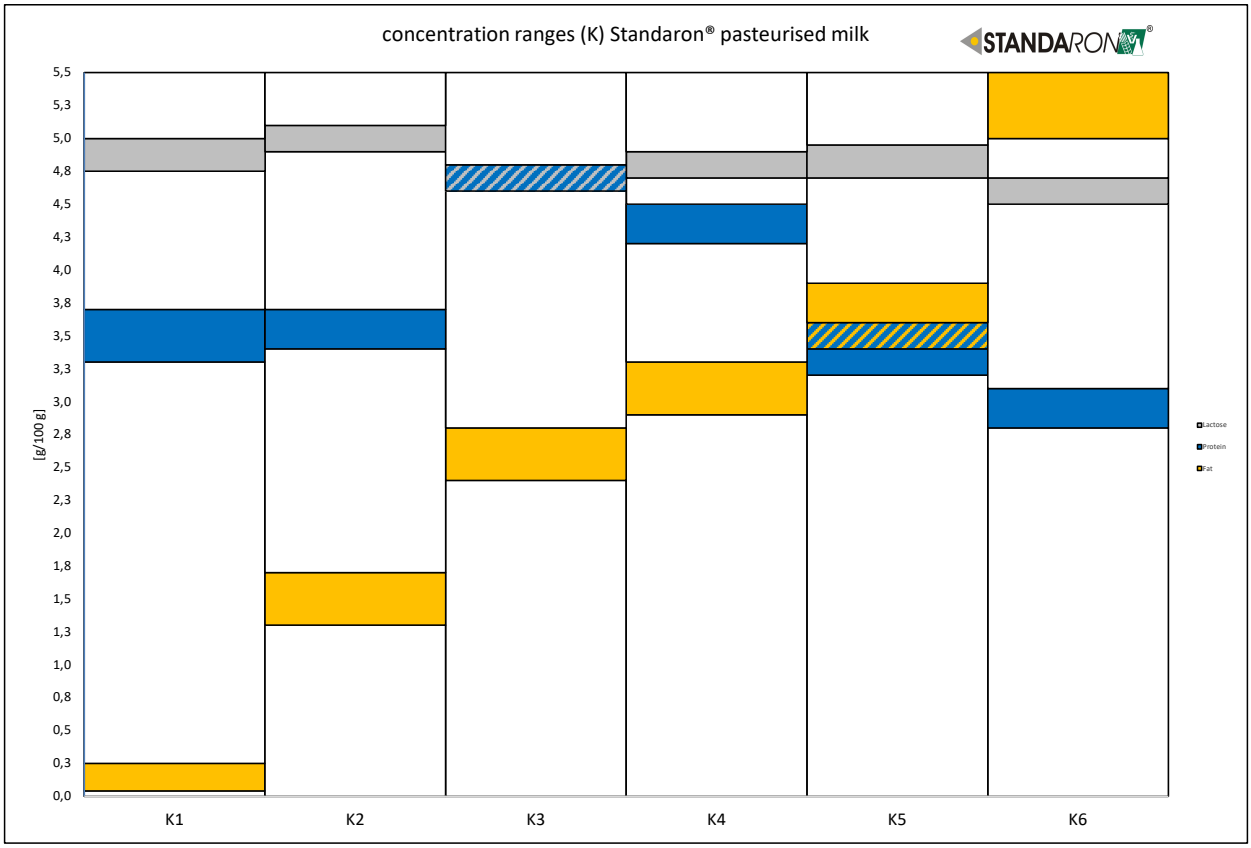
* unmodified raw milk, higher variances possible



STANDARON® - overview pasteurized milk

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

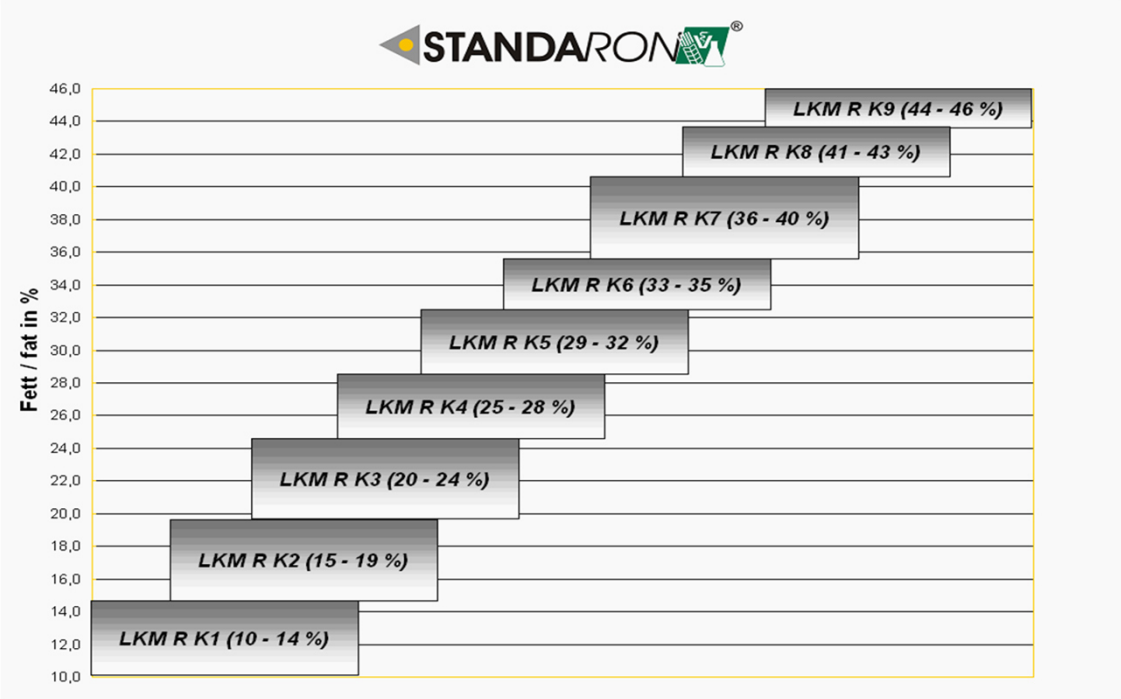
LKM-type	Art. No.	fat	protein	lactose	dry matter	freezing point	packaging unit	prices
		Röse-Gottlieb	*Kjeldahl*	*enzym.*	*102 °C*	*cryoscopy*		
		g/100g	g/100g	g/100g	g/100g	m°C		
LKM PAM K1	1141001	**2,0 - 2,5 %**	**4,6 - 5,0 %**	**4,8 - 4,9 %**	**available reference material and the corresponding reference values are available on request**		**50 ml**	18 €
LKM PAM K2	1141002	**2,5 - 3,0 %**	**4,2 - 4,6 %**	**4,9 - 5,1 %**				
LKM PAM K3	1141003	**3,0 - 3,4 %**	**3,8 - 4,2 %**	**4,6 - 4,8 %**				
LKM PAM K4	1141004	**3,3 - 3,7 %**	**3,4 - 3,8 %**	**4,6 - 4,8 %**				
LKM PAM K5	1141005	**3,6 - 4,0 %**	**3,1 - 3,4 %**	**4,6 - 4,8 %**				
LKM PAM K6	1141006	**3,6 - 4,4 %**	**3,2 - 3,6 %**	**4,6 - 4,8 %**				



STANDARON® - overview raw cream

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

LKM-type	Art. No.	fat	protein	dry matter	packaging unit	prices
		Röse-Gottlieb	*Kjeldahl*	*102 °C*		
		g/100g	g/100g	g/100g		
LKM R K1	1141011	**10 - 14 %**	**available reference material and the corresponding reference values are available on request**		**50 ml**	20 €
LKM R K2	1141012	**15 - 19 %**				
LKM R K3	1141013	**20 - 24 %**				
LKM R K4	1141014	**25 - 28 %**				
LKM R K5	1141015	**29 - 32 %**				
LKM R K6	1141016	**33 - 35 %**				
LKM R K7	1141017	**36 - 40 %**				
LKM R K8	1141018	**41 - 43 %**				24 €
LKM R K9	1141019	**44 - 46 %**				25 €



STANDARON® - overview whey

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

LKM-type	Art. No.	fat	protein	lactose monohydrate	dry matter	ash	packaging unit	prices
		Röse-Gottlieb	*Kjeldahl*	*enzym.*	*102 °C*	*500-550 °C*		
		g/100g	g/100g	g/100g	g/100g	g/100 g		
sweet whey	1141031	**available reference material and the corresponding reference values are available on request**					**50 ml**	22 €
sour whey	1141032						**50 ml**	
whey concentrate	1141033						**50 ml**	

Your contact persons at DRRR GmbH, Kempten: Team Reference Materials Dr. Ulrich Leist	+49 (0)8 31/960 878-0
Your contact persons at LUFA NORD-WEST, Oldenburg Sarah Pietsch	+49 (0)4 41/97 352-152

Reference material - chemical-physical

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

Art. no.	material description		Parameters [*]	additional information / packaging unit / price:
	Milk and cream			on request: info@drrr.de
1101001	**UHT Milk**	☐	fat [g/100g], dry matter [g/100g], protein (N x 6,38) [g/100g], lactose (monohydrate) [g/100g], freezing point [m°C], density [g/ml]	
1101007	**Evaporated milk**	☐	fat [g/100g], dry matter [g/100g], protein (N x 6,38) [g/100g], ash [g/100g], phosphorus (P) [mg/100g]	
1121064	**Dairy drinks**	☐	fat [g/100g], crude protein (N x 6,38) [g/100g], dry matter [g/100g], sucrose (anhydrous) [g/100g], glucose (anhydrous) [g/100g], lactose (monohydrate) [g/100g], fructose (anhydrous) [g/100g], total sugar (anhydrous) [g/100g]	
	Milk products (other)			
1111007	**Butter**	☐	solids non fat [g/100g], moisture content [g/100g], hardness [N], chloride [mg/100g], cholesterol [mg/100g], pH value [-]	
1111008	**Butter (fatty acid profile)**	☐	butyric acid [% / fat], caproic acid [% / fat], caprylic acid [% / fat], capric acid [% / fat], lauric acid [% / fat], myristic acid [% / fat], myristoleic acid [% / fat], myristelaidic acid [% / fat], palmicit acid [% / fat], palmitoleic acid [% / fat], palmitelaidic acid [% / fat], stearic acid [% / fat], linoleic acid [% / fat], linolenic acid [% / fat], gamma linolenic acid [% / fat], eicosatrienoic acid [% / fat], eicosatetraenoic acid [% / fat], eicosapentaenoic acid [% / fat]	
1111009	**Yoghurt**	☐	fat [g/100g], dry matter [g/100g], protein (N x 6,38) [g/100g], pH value [-], total lactic acid [mg/100g]	
1111010	**Pudding - dessert**	☐	fat [g/100g], dry matter [g/100g], protein (N x 6,38) [g/100g], lactose (monohydrate) [g/100g], pH value [-]	
1111011	**AMF anhydrous milk fat**	☐	water content [g/100g], free fatty acids [g/100g], total β-carotene [mg/kg], butyric acid methyl ester [g/100g]	
	Ice-cream			
1121001	**Ice cream (base mix)**	☐	total fat [g/100 g], milk fat [g/100 g], colouring agent cochenille red A [mg/kg], lactose (monohydrate) [g/100 g], vanillin [mg/kg], vanillin acid [mg/kg], p-hydroxybenzaldehyde [mg/kg], p-hydroxybenzoic acid [mg/kg], colouring agent curcumin [pos./neg.], colouring agent β-carotene [pos./neg.], colouring agent cochenille red A qual. [pos./neg.], foreign fat (added fat) [pos./neg.]	
	Cheese			
1111001	**Processed cheese**	☐	fat [g/100g], dry matter [g/100g], protein (N x 6,38) [g/100g], total lactic acid [mg/100g], pH value [-], sodium chloride [g/100g], nitrate [mg/kg], citric acid (monydrate) [mg/100g], phosphorus [mg/100g], ash [g/100g], lactose (monohydrate) [g/100g]	
1111002	**Fresh cheese**	☐	fat [g/100g], dry matter [g/100g], protein (N x 6,38) [g/100g], total lactic acid [mg/100g]	
1111004	**Semi hard cheese**	☐	fat [g/100g], dry matter [g/100g], protein (N x 6,38) [g/100g], sodium chloride [g/100g], nitrate [mg/kg]	
1111005	**Hard cheese**	☐	fat [g/100g], dry matter [g/100g], protein (N x 6,38) [g/100g], sodium chloride [g/100g]	
1111006	**Soft cheese**	☐	fat [g/100g], dry matter [g/100g], protein (N x 6,38) [g/100g], sodium chloride [g/100g], pH value [-]	
	Milk powder			
1121002	**Whole milk powder**	☐	fat [g/100 g], free fat [g/100 g], moisture content [g/100 g], crude protein (N x 6,38) [g/100 g], lactose (monohydrate) [g/100 g], ash [g/100 g], titratable acid [g/100 g], pH value [-]	
1121004	**Milk powder (lactose reduced)**	☐	lactose (monohydrate) - chromatographic [g/100 g], lactose (monohydrate) - enzymatic [g/100 g], moisture content [g/100 g]	
1121005	**Milk powder nitrate - nitrite**	☐	nitrate [mg/kg], nitrite [mg/kg]	
1121007	**Whey powder**	☐	fat [g/100 g], moisture content [g/100 g], crude protein (N x 6,38) [g/100 g], ash [g/100 g], lactose (monohydrate) [g/100 g], titratable acid [g/100 g], pH value [-]	
1151004	**Mineral oil in cheese and milk powder**	☐	MOSH C10-C16 [mg/kg], MOSH C16-C20 [mg/kg], MOSH C20-C25 [mg/kg], MOSH C25-C35 [mg/kg], MOSH C35-C40 [mg/kg], MOSH C40-C50 [mg/kg], MOAH C10-C16 [mg/kg], MOAH C16-C25 [mg/kg], MOAH C25-C35 [mg/kg], MOAH C35-C50 [mg/kg], MOSH C10-C50 [mg/kg], MOAH C10-C50 [mg/kg]	

[*] = In individual cases it can happen that there is no reference value available for a listed parameter

Reference material - chemical-physical

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

Art. no.	material description		Parameters [*]	additional information / packaging unit / price:
				on request: info@drrr.de
Egg products				
1121028	**Egg products**	☐	total lipids [g/100 g], crude protein (N x 6,25) [g/100 g], dry matter [g/100 g], pH value [-], cholesterol [mg/100 g], α-linolenic acid methyl ester [g/100 g total fatty acid methyl ester], eicosapentaenoic acid methyl ester [g/100 g total fatty acid methyl ester], docosahexaenoic acid methyl ester [g/100 g total fatty acid methyl ester], sodium chloride [g/100 g]	
1121029	**Egg pasta**	☐	total fat [g/100 g], crude protein (N x 6,25) [g/100 g], dry matter [g/100 g], ash [g/100 g], sodium chloride [g/100 g], cholesterol [mg/100 g], total sterols [mg/100 g], egg content [g/100 g], fibre [g/100 g]	
1121030	**Mayonnaise**	☐	total acid (pH 8.1) calculated as acetic acid [g/100 g], dry matter [g/100 g], total fat [g/100 g], cholesterol [mg/100 g], egg yolk content [g/100 g], sorbic acid [g/kg], benzoic acid [g/kg], sodium chloride [g/100 g], pH value [-]	
1121088	**Egg powder**	☐	total lipids [g/100 g], ash [g/100 g], pH value [-], dry matter [g/100 g], sodium chloride [g/100 g], L-lactic acid [mg/kg], D-3-hydroxybutyric acid [mg/kg], crude protein (N x 6,25) [g/100 g]	
1121154	**PFAS in liquid egg**	☐	total perfluorooctanesulfonic acid (CAS 1763-23-1) [µg/kg], total perfluorooctanoic acid (CAS 335 67-1) [µg/kg], total perfluorononanoic acid (CAS 375-95-1) [µg/kg], total perfluorohexane sulfonic acid (CAS 355-46-4) [µg/kg], total perfluorohexanoic acid (CAS 307-24-4) [µg/kg], total perfluorodecanoic acid (CAS 335-76-2) [µg/kg], total perfluorundecanoic acid (CAS 2058-94-8) [µg/kg], total perfluorododecanoic acid (CAS 307-55-1) [µg/kg], total perfluorotridecanoic acid (CAS 72629-94-8) [µg/kg], total perfluorotetradecanoic acid (CAS 376-06-7) [µg/kg], total perfluorobutane sulfonic acid (CAS 375-73-5) [µg/kg], total perfluorodecane sulfonic acid (CAS 335-77-3) [µg/kg], total perfluorooctanesulfonamide (CAS 754-91-6) [µg/kg]	
Fruit & vegetables products				
1121009	**Sugar mix (fruit preparation)**	☐	sucrose (anhydrous) [g/100 g], glucose (anhydrous) [g/100 g], fructose (anhydrous) [g/100 g], maltose (anhydrous) [g/100 g], starch [g/100 g], aspartame [ppm], acesulfam K [ppm], sorbate (as anion) [ppm], saccharin as free imide [ppm], total sugar (anhydrous) [g/100 g]	
1121010	**Fruit preparation**	☐	brix value [°brix], pH value [-], total acid (pH 8.1) calculated as citric acid (anhydrous) [g/kg], L malic acid [g/kg], ash [g/kg], phosphorus (P) [g/kg], potassium (K) [mg/100 g]	
1121013	**Dry potato product**	☐	moisture content [g/100 g], total fat [g/100 g], saturated fatty acids [g/100 g], crude protein (N x 6,25) [g/100 g], ash [g/100 g], carbohydrates [g/100 g], starch [g/100 g], sucrose (anhydrous) [g/100 g], fibre [g/100 g], sodium (Na) [g/100 g]	
1121014	**Tomato ketchup**	☐	pH value [-], total acid (pH 8.1) calculated as acetic acid [g/100 g], citric acid (anhydrous) [g/100 g], sodium chloride [g/100 g], glucose (anhydrous) [g/100 g], fructose (anhydrous) [g/100 g], soluble solids [g/100 g], dry matter [g/100 g], sorbic acid [g/kg], benzoic acid [g/kg], sucrose (anhydrous) [g/100 g], total sugar (anhydrous) [g/100 g]	
Vegan und vegetarian substitutes				
1121092	**Plant drink (milk alternative)**	☐	fat [g/100 g], dry matter [g/100 g], crude protein (N x 6,38) [g/100 g], freezing point [m°C], density [g/ml]	
1121069	**Vegetarian sausage substitute**	☐	total fat [g/100 g], crude protein (N x 6,25) [g/100 g], dry matter [g/100 g], sodium chloride [g/100 g], ash [g/100 g], fibre [g/100 g], pH value [-]	
Meat products				
1121031	**Boiled sausage 1**	☐	total fat [g/100 g], moisture content [g/100 g], ash [g/100 g], crude protein (N x 6,25) [g/100 g], hydroxyproline [g/100 g], sodium chloride [g/100 g], sodium nitrate [mg/kg], sodium nitrite [mg/kg], diphosphorus pentoxide (P2O5) [g/100 g], calcium (Ca) [mg/kg], aw value [-], starch [g/100 g]	
1121032	**Boiled sausage 2**	☐	non-protein nitrogen (NPN) x 6.25 [g/100 g], collagen decomposition products [g/100 g], L-glutamic acid [mg/kg], citric acid (anhydrous) [mg/kg], sodium acetate [mg/kg], L-lactate [mg/kg], sodium nitrate [mg/kg], sodium nitrite [mg/kg], total ascorbic acid (vitamin C) [mg/100 g], pH value [-]	
1121033	**Raw sausage 1**	☐	aw value [-], pH value [-], D-lactic acid [mg/kg], L-lactic acid [mg/kg], sodium (Na) [mg/100 g], sodium nitrate [mg/kg], sodium nitrite [mg/kg], sorbic acid [mg/kg], saturated fatty acids [g/100 g Fett (fat)], monounsaturated fatty acids [g/100 g Fett (fat)], total fat [g/100 g]	
1121060	**Raw sausage 2**	☐	sodium (Na) [mg/100 g], total fat [g/100 g], crude protein (N x 6,25) [g/100 g], moisture content [g/100 g], ash [g/100 g], sodium chloride [g/100 g], hydroxyproline [g/100 g], diphosphorus pentoxide (P2O5) [g/100 g], starch [g/100 g], solubilised milk protein [g/100 g]	
1121142	**Cooked sausage**	☐	total fat [g/100 g], crude protein (N x 6,25) [g/100 g], moisture content [g/100 g], ash [g/100 g], sodium chloride [g/100 g], pH value [-], aw value [-], hydroxyproline [g/100 g], sodium nitrate [mg/kg], sodium nitrite [mg/kg], starch [g/100 g], diphosphorus pentoxide (P2O5) [g/100 g], L-glutamic acid [mg/kg]	
Fish and seafood				
1121034	**Fish paste 1**	☐	moisture content [g/100 g], total fat [g/100 g], crude protein (N x 6,25) [g/100 g], ash [g/100 g], sodium chloride [g/100 g], arsenic (As) [µg/100 g], iodine (I) [µg/100 g]	
1121035	**Fish paste 2**	☐	total fat [g/100 g], sorbic acid [mg/100 g], benzoic acid [mg/100 g], saccharin as free imide [mg/100 g], cyclamate [mg/100 g], citric acid (anhydrous) [mg/100 g]	
1121148	**PFAS in fish**	☐	total perfluorooctanesulfonic acid (CAS 1763-23-1) [µg/kg], total perfluorooctanoic acid (CAS 335 67-1) [µg/kg], total perfluorononanoic acid (CAS 375-95-1) [µg/kg], total perfluorohexane sulfonic acid (CAS 355-46-4) [µg/kg]	

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Reference material - chemical-physical

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

Art. no.	material description		Parameters [*]	additional information / packaging unit / price:
				on request: info@drrr.de
Nonalcoholic beverages				
1121015	**Coffee**	☐	water content [g/100 g], ash [g/100 g], pH value [-], acid content (acidity) at pH 6,00 [mmol/kg], acid content (acidity) at pH 7,00 [mmol/kg], acid content (acidity) at pH 8,00 [mmol/kg], water soluble extract [g/100 g], caffeine [g/100 g], acrylamide (CAS 79-06-1) [µg/kg], chlorogenic acid [g/100 g]	
1121016	**Tea**	☐	dry matter [g/100 g], ash [g/100 g dry matter], water soluble ash [g/100 g dry matter], water soluble extract [g/100 g dry matter], caffeine [g/100 g dry matter], theobromine [mg/100 g dry matter], theophylline [mg/100 g dry matter], acid-insoluble ash [g/100 g dry matter]	
1121017	**Energy drink**	☐	pH value [-], taurine [mg/l], caffeine [mg/l], inosit [mg/l], glucuronolactone [mg/l], sucrose (anhydrous) [g/l], glucose (anhydrous) [g/l], fructose (anhydrous) [g/l], total sugar (anhydrous) [g/l], total acid (pH 8.1) calculated as tartaric acid [g/l], relative density (20 °C/20 °C) [-], absorption of light at a wavelength of 400 nm [-], absorption of light at a wavelength of 460 nm [-], absorption of light at a wavelength of 520 nm [-], absorption of light at a wavelength of 630 nm [-], CO2 content [g/l], dissolved oxygen [ppm]	
1121018	**Vitamin solution**	☐	thiamine (vitamin B1) as thiamine chloride [mg/100 ml], riboflavine (vitamin B2) as total vitamin B2 [mg/100 ml], niacin (vitamin B3) [mg/100 ml], pantothenic acid (vitamin B5) [mg/100 ml], pyridoxine (vitamin B6) [mg/100 ml], folic acid (vitamin B11) [µg/100 ml], cyanocobalamin (vitamin B12) [µg/100 ml], L-ascorbic acid [mg/100 ml], α-tocopherol (vitamin E) [mg/100 ml], riboflavin [mg/100 ml], flavin mononucleotide [mg/100 ml], total ascorbic acid (vitamin C) [mg/100 ml], dehydroascorbic acid [mg/100 ml]	
1121021	**Carrot juice**	☐	relative density (20 °C/20 °C) [-], pH value [-], total acid (pH 8.1) calculated as tartaric acid [g/l], sucrose (anhydrous) [g/l], fructose (anhydrous) [g/l], glucose (anhydrous) [g/l], nitrate [mg/l], total β-carotene [mg/100 g], α-carotene [mg/100 g], total carotenes [mg/100 g], total sugar (anhydrous) [g/l]	
1121058	**Fruit juice concentrate**	☐	brix value [°brix], pH value [-], titratable acidity (pH 8.1) [mmol H+/kg], citric acid (anhydrous) [g/kg], total D-isocitric acid [mg/kg], L-malic acid [g/kg], total lactic acid [g/kg], L-ascorbic acid [mg/100 g], dehydroascorbic acid [mg/100 g], total ascorbic acid [mg/100 g], hesperidin [mg/kg], glucose (anhydrous) [g/kg], fructose (anhydrous) [g/kg], sucrose (anhydrous) [g/kg], total sugar (anhydrous) [g/kg], potassium (K) [mg/kg], calcium (Ca) [mg/kg], magnesium (Mg) [mg/kg], sodium (Na) [mg/kg]	
1121059	**Fruit juice concentrate 2**	☐	brix value [°brix], titratable acidity (pH 8.1) [mmol H+/kg], glucose (anhydrous) [g/kg], fructose (anhydrous) [g/kg], sucrose (anhydrous) [g/kg], total sugar (anhydrous) [g/kg], sugar-free extract [g/kg], glucose/fructose ratio [-], % sucrose of sugar [%]	
1121062	**Fruit juice concentrate 3**	☐	brix value [°brix], pH value [-], titratable acidity (pH 8.1) [mmol H+/kg], ash [g/kg], potassium (K) [mg/kg], calcium (Ca) [mg/kg], magnesium (Mg) [mg/kg], phosphorus (P) [mg/kg], sodium (Na) [mg/kg], nitrate [mg/kg], copper (Cu) [mg/kg], iron (Fe) [mg/kg]	
1121053	**Grape juice**	☐	sulphur dioxide (SO2) [mg/l]	
1121054	**Currant juice**	☐	lead (Pb) [mg/kg], cadmium (Cd) [mg/kg], arsenic (As) [mg/kg], copper (Cu) [mg/kg], zinc (Zn) [mg/kg], iron (Fe) [mg/kg], tin (Sn) [mg/kg], mercury (Hg) [mg/kg], aluminium (Al) [mg/kg], nickel (Ni) [mg/kg]	
1121055	**Tomato juice**	☐	total ergosterol [mg/l]	
Alcoholic beverages				
1121026	**Beer**	☐	apparent extract [g/100 g], real extract [g/100 g], alcohol by weight [g/100 g], alcohol by volume [ml/100 ml], original wort [g/100 g], relative density (20 °C/20 °C) [-], bitterness units [IBU], pH value [-]	
Cereals, cereal products				
1121037	**Pastries**	☐	total fat [g/100 g], crude protein (N x 6,25) [g/100 g], dry matter [g/100 g], ash [g/100 g], milk fat [g/100 g], sucrose (anhydrous) [g/100 g], starch [g/100 g]	
1121061	**Pastries**	☐	propionic acid [mg/kg]	
1121038	**Flour**	☐	moisture content [g/100 g], crude protein (N x 5,7) [g/100 g], ash [g/100 g], starch [g/100 g], wet gluten [g/100 g], falling number [s], total acid (pH 8.5) calculated as lactic acid [g/100 g]	
1121040	**Butter biscuit**	☐	ash [g/100 g], dry matter [g/100 g], crude protein (N x 6,25) [g/100 g], total fat [g/100 g], semimicro butyric acid number [-], free butyric acid [g/100 g fat], butyric acid methyl ester [g/100 g fat], milk fat [g/100 g], starch [g/100 g], cholesterol [mg/100 g], sucrose (anhydrous) [g/100 g], fibre [g/100 g]	
1151016	**Mineral oil in low-fat and starch-rich foodstuff**	☐	MOSH C10-C16 [mg/kg], MOSH C16-C20 [mg/kg], MOSH C20-C25 [mg/kg], MOSH C25-C35 [mg/kg], MOSH C35-C40 [mg/kg], MOSH C40-C50 [mg/kg], MOAH C10-C16 [mg/kg], MOAH C16-C25 [mg/kg], MOAH C25-C35 [mg/kg], MOAH C35-C50 [mg/kg], MOSH C10-C50 [mg/kg], MOAH C10-C50 [mg/kg]	
Infant formula				
1101010	**Milk powder IMF part 1**	☐	fat [g/100g], crude protein (N x 6,25) [g/100g], ash [g/100g], moisture content [g/100g], retinol (vitamin A) as all-E-retinol [µg/100g], total ascorbic acid (vitamin C) [mg/100g]	
1101011	**Milk powder IMF part 2**	☐	sodium (Na) [mg/100g], potassium (K) [mg/100g], calcium (Ca) [mg/100g], magnesium (Mg) [mg/100g], phosphorus (P) [mg/100g], iron (Fe) [mg/100g], copper (Cu) [µg/100g], zinc (Zn) [mg/100g], manganese (Mn) [µg/100g]	
1121153	**PFAS in baby food**	☐	total perfluorooctanesulfonic acid (CAS 1763-23-1) [ng/kg], total perfluorooctanoic acid (CAS 335 67-1) [ng/kg], total perfluorononanoic acid (CAS 375-95-1) [ng/kg], total perfluorohexane sulfonic acid (CAS 355-46-4) [ng/kg]	

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Reference material - chemical-physical

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

Art. no.	material description	Parameters [*]	additional information / packaging unit / price:
	Declaration nutrition values		on request: info@drrr.de
1121044	**Declaration nutrition values with 2 different food stuff**	energy value [kJ/100 g], protein [g/100 g], carbohydrate [g/100 g], sugar [g/100 g], fat [g/100 g], saturated fatty acids [g/100 g], fibre [g/100 g], salt [g/100 g]	
	Animal feed		
1121112	**Ingredients animal feed (round 1)**	moisture content [g/100 g], crude protein (N x 6,25) [g/100 g], crude oil [g/100 g], crude ash [g/100 g], crude fiber [g/100 g], total sugar (anhydrous) [g/100 g], lactose (monohydrate) [g/100 g], starch [g/100 g], ash (insoluble in hydrochloric acid) [g/100 g], calcium carbonate [g/100 g]	
	Honey and beeswax		
1121047	**Honey**	diastase number acc. to Schade [-], proline [mg/kg], hydroxymethylfurfural (CAS 67-47-0) [mg/kg], electrical conductivity [mS/cm], moisture [g/100 g], glycerin [mg/kg], ethanol (CAS 64-17-5) [mg/kg], pH value [-]	
1121076	**Pyrrolizidine alkaloids in honey**	Screening for at least 9 different pyrrolizidine alkaloids, e.g. monocrotaline, heliotrine, retrorsine	
	Cocoa and chocolate		
1121048	**Chocolate**	total fat [g/100 g], milk fat [g/100 g], crude protein (N x 6,25) [g/100 g], water content [g/100 g], lactose (monohydrate) [g/100 g], sucrose (anhydrous) [g/100 g], theobromine [mg/100 g], caffeine [mg/100 g], dry matter [g/100 g], acrylamide (CAS 79-06-1) [µg/kg]	
1151053	**Mineral oil in cocoa butter and chocolate**	MOSH C10-C16 [mg/kg], MOSH C16-C20 [mg/kg], MOSH C20-C25 [mg/kg], MOSH C25-C35 [mg/kg], MOSH C35-C40 [mg/kg], MOSH C40-C50 [mg/kg], MOAH C10-C16 [mg/kg], MOAH C16-C25 [mg/kg], MOAH C25-C35 [mg/kg], MOAH C35-C50 [mg/kg], MOSH C10-C50 [mg/kg], MOAH C10-C50 [mg/kg]	
	Fats, oils and oilseeds		
1121068	**Edible fat**	iodine value [g iodine / 100 g fat], acid value [mg KOH/g fat], peroxide value [mEq active oxygen/kg], saponification value [mg KOH/g fat], free fatty acids [mg/100 g], p-anisidine value [AV], Refractive Index [nD], water content [g/100 g]	
1121089	**PAHs in animal and vegetable fats and oils**	benzo[a]pyrene (CAS 50-32-8) [µg/kg], benzo[a]anthracene (CAS 56-55-3) [µg/kg], chrysene (CAS 218-01-9) [µg/kg], benzo[b]fluoranthene (CAS 205-99-2) [µg/kg], sum of PAHs [µg/kg]	
1151017	**Mineral oil in edible fats**	MOSH C10-C16 [mg/kg], MOSH C16-C20 [mg/kg], MOSH C20-C25 [mg/kg], MOSH C25-C35 [mg/kg], MOSH C35-C40 [mg/kg], MOSH C40-C50 [mg/kg], MOAH C10-C16 [mg/kg], MOAH C16-C25 [mg/kg], MOAH C25-C35 [mg/kg], MOAH C35-C50 [mg/kg], MOSH C10-C50 [mg/kg], MOAH C10-C50 [mg/kg]	
1151017	**Mineral oil in edible oils**	MOSH C10-C16 [mg/kg], MOSH C16-C20 [mg/kg], MOSH C20-C25 [mg/kg], MOSH C25-C35 [mg/kg], MOSH C35-C40 [mg/kg], MOSH C40-C50 [mg/kg], MOAH C10-C16 [mg/kg], MOAH C16-C25 [mg/kg], MOAH C25-C35 [mg/kg], MOAH C35-C50 [mg/kg], MOSH C10-C50 [mg/kg], MOAH C10-C50 [mg/kg]	

[*] = In individual cases it can happen that there is no reference value available for a listed parameter

Reference material - organoleptic

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

Art. no.	material description	Parameters [*]	additional information / packaging unit / price:
	Nonalcoholic beverages		on request: info@drrr.de
3321001	**Drinking water (TON, TFN)**	☐ Threshold odour number (TON)	
3321002	**Drinking water (TON, TFN)**	☐ Threshold flavour number (TFN)	

[*] = In individual cases it can happen that there is no reference value available for a listed parameter

Reference material - immunological, molecular biological & microbiological

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

Art. no.	material description		Parameters [*]	risk group	additional information / packaging unit / price:
					on request: info@drrr.de
Milk and cream					
2201003	**E.coli milk**	☐	E.coli [cfu/g], aerobic total count [cfu/g]	**risk group 1**	
2201004	**Enterobacteriaceae milk**	☐	Enterobacteriaceae [cfu/g], aerobic total count [cfu/g]	**risk group 1**	
2201005	**Enumeration of aerobic spores in milk**	☐	aerobic spores [cfu/g], aerobic total count [cfu/g]	**risk group 1**	
2201006	**Detection of Campylobacter spp. in milk**	☐	Campylobacter spp. (pos./neg.)	**risk group 2**	
2201076	**Psychrotrophic bacteria milk**	☐	psychrotrophic total count (7°C) [cfu/g], psychrotrophic total count (21°C) [cfu/g]	**risk group 1**	
2201074	**Enumeration of yeasts in milk**	☐	yeasts [cfu/g], aerobic total count [cfu/g]	**risk group 1**	
2201048	**detection of B. cereus in milk**	☐	Vibrio parahaemolyticus (pos./neg.)	**risk group 2**	
2201108	**Detection B.cereus milk**	☐	B.cereus qualitative [-] (pos./neg.)	**risk group 2**	
1101025	**Milk (residues)**	☐	Chloramphenicol (CAS 56-75-7) [µg/kg], PCB 101 (CAS 37680-73-2) [(mg/kg) fat], trichlormethane (CAS 67-66-3) [mg/kg], aflatoxin M1 [µg/kg], Streptomycin (CAS 57-92-1) [µg/l], tetracycline (CAS 60-54-8) [µg/kg]		
Milk products (other)					
2201101	**Enumeration of characteristic microorganisms in yoghurt**	☐	Lactobacillus bulgaricus [cfu/g], Streptococcus thermophilus [cfu/g]	**risk group 1**	
Cheese					
2201007	**Enumeration of E. coli in cheese**	☐	E.coli [cfu/g], aerobic total count [cfu/g]	**risk group 1**	
2201008	**Detection of Listeria in cheese**	☐	L. monocytogenes qualitative (pos./neg.)	**risk group 2**	
2201009	**Enumeration of enterobacteriaceae in cheese**	☐	Enterobacteriaceae [cfu/g], aerobic total count [cfu/g]	**risk group 1**	
2201010	**Enumeration of moulds in cheese**	☐	moulds [cfu/g], aerobic total count [cfu/g]	**risk group 1**	
2201011	**Enumeration of yeasts in cheese**	☐	yeasts [cfu/g], aerobic total count [cfu/g]	**risk group 1**	
2201012	**Enumeration of coagulase-pos. staphylococcus in cheese**	☐	coagulase-positive Staphylococcus [cfu/g], aerobic total count [cfu/g]	**risk group 2**	
2201013	**Enumeration of B. cereus in cheese**	☐	B.cereus [cfu/g], aerobic total count [cfu/g]	**risk group 2**	
1111012	**Processed cheese (natamycin, aflatoxin)**	☐	natamycin (CAS 7681-93-8) [mg/kg], aflatoxin M1 [µg/kg]		
Ice-cream					
2201063	**Enumeration of enterobacteriaceae in ice cream**	☐	Enterobacteriaceae [cfu/g], aerobic total count [cfu/g]	**risk group 2**	
2201065	**Detection of Salmonella spp. in ice cream**	☐	Salmonella spp. (pos./neg.)	**risk group 2**	
2201064	**Enumeration of E. coli in ice cream**	☐	E.coli [cfu/g], aerobic total count [cfu/g]	**risk group 1**	
2201066	**Enumeration of L. monocytogenes in ice cream**	☐	L. monocytogenes qualitative (pos./neg.)	**risk group 2**	

[*] = Sometimes we used more than one method per parameter. The values of the germ contens varies for each material from 10^2 to 10^5 KbE/g or KbE/ml and can be asked before order.

Reference material - immunological, molecular biological & microbiological

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

Art. no.	material description		Parameters [*]	risk group	additional information / packaging unit / price:
	Milk powder				on request: info@drrr.de
2201014	**Enumeration of coliform bacteria in milk powder**	☐	Coliforms [cfu/g], aerobic total count [cfu/g]	**risk group 1**	
2201015	**Moulds milk powder**	☐	moulds [cfu/g], aerobic total count [cfu/g]	**risk group 1**	
2201016	**Yeasts milk powder**	☐	yeasts [cfu/g], aerobic total count [cfu/g]	**risk group 1**	
2201017	**Enumeration of E. coli in milk powder**	☐	E.coli [cfu/g], aerobic total count [cfu/g]	**risk group 1**	
2201018	**Enumeration of Enterobacteriaceae in milk powder**	☐	Enterobacteriaceae [cfu/g], aerobic total count [cfu/g]	**risk group 1**	
2201019	**Enumeration of enterococci in milk powder**	☐	Enterococcus [cfu/g], aerobic total count [cfu/g]	**risk group 1**	
2201020	**Enumeration of lactic acid bacteria in milk powder**	☐	lactobacilli (microaerophilic) [cfu/g], aerobic total count [cfu/g], lactobacilli (aerobic) [cfu/g]	**risk group 1**	
2201021	**Detection of Shigella spp. in milk powder**	☐	Shigella spp. (pos./neg.)	**risk group 2**	
2201022	**Enumeration of clostridia in milk powder**	☐	sulfite-reducing Clostridia (vegetative) [cfu/g], anaerobic total count [cfu/g], anaerobic, mesophilic , sulfite-reducing spores [cfu/g], C.perfringens [cfu/g]	**risk group 2**	
2201083	**Detection of clostridia in milk powder**	☐	Clostridia spp. (pos./neg.)	**risk group 2**	
2201023	**Enumeration of B. cereus in milk powder**	☐	B.cereus [cfu/g], aerobic total count [cfu/g]	**risk group 2**	
2201024	**Detection of Cronobacter spp. in milk powder**	☐	Cronobacter spp. (pos./neg.)	**risk group 2**	
2201025	**Salmonella spp. milk powder**	☐	Salmonella spp. (pos./neg.)	**risk group 2**	
2201026	**Enumeration of coagulase-pos. staphylococcus in milk powder**	☐	coagulase-positive Staphylococcus [cfu/g], aerobic total count [cfu/g]	**risk group 2**	
2201078	**Detection of coagulase-pos. staphylococcus in milk powder**	☐	coagulase-positive Staphylococcus qualitative (pos./neg.)	**risk group 2**	
2201028	**Listeria milk powder qualitative**	☐	L.monocytogenes qualitative (pos./neg.)	**risk group 2**	
2201027	**Listeria milk powder quantitative**	☐	L.monocytogenes qualitative (pos./neg.)	**risk group 2**	
2201062	**Enumeration of thermophilic bacteria (55°C) in milk powder**	☐	thermophilic aerobic total count (55°C, vegetative) [cfu/g], thermoresistent spores of aerobic, thermophilic bacteria [cfu/g]	**risk group 1**	
2201080	**Enumeration of anaerobic mesophilic spores in milk powder**	☐	anaerobic mesophilic spores [cfu/g], anaerobic total count [cfu/g]	**risk group 2**	
2201082	**Detection of Pseudomonas spp. in milk powder**	☐	Pseudomonas spp. qualitative (pos./neg.)	**risk group 2**	

[*] = Sometimes we used more than one method per parameter. The values of the germ contens varies for each material from 10^2 to 10^5 KbE/g or KbE/ml and can be asked before order.

Reference material - immunological, molecular biological & microbiological

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

Art. no.	material description		Parameters [*]	risk group	additional information / packaging unit / price:
	Meat products				on request: info@drrr.de
2201038	**E.coli ground meat**	☐	E.coli [cfu/g], aerobic total count [cfu/g]	**risk group 1**	
2201039	**Enterobacteriaceae ground meat**	☐	Enterobacteriaceae [cfu/g], aerobic total count [cfu/g]	**risk group 1**	
2201040	**Enumeration of lactic acid bacteria in ground meat**	☐	lactobacilli (aerobic) [cfu/g], aerobic total count [cfu/g]	**risk group 1**	
2201041	**Enumeration of coagulase-pos. staphylococcus in ground meat**	☐	coagulase-positive Staphylococcus [cfu/g], aerobic total count [cfu/g]	**risk group 2**	
2201042	**Enumeration of Pseudomonas spp. in ground meat**	☐	Pseudomonas spp. [cfu/g], aerobic total count [cfu/g]	**risk group 2**	
2201043	**Salmonella spp. ground meat**	☐	Salmonella spp. (pos./neg.)	**risk group 2**	
2201044	**Enumeration of Listeria in ground meat**	☐	L. monocytogenes [cfu/g], aerobic total count [cfu/g]	**risk group 2**	
2201045	**Listeria ground meat qualitative**	☐	L. monocytogenes qualitative (pos./neg.)	**risk group 2**	
2201046	**Detection of Campylobacter spp. in poultry**	☐	Campylobacter spp. (pos./neg.)	**risk group 2**	
2201107	**Enumeration of Campylobacter spp. in poultry**	☐	Campylobacter spp. quantitative [CFU/g]	**risk group 2**	
2201081	**Enumeration of coliform bacteria in ground meat**	☐	Coliforms [cfu/g], aerobic total count [cfu/g]	**risk group 1**	
2201084	**Enumeration of clostridia in ground meat**	☐	sulfite-reducing Clostridia (vegetative) [cfu/g], anaerobic total count [cfu/g], anaerobic, mesophilic , sulfite-reducing spores [cfu/g], C.perfringens [cfu/g]	**risk group 2**	
1121056	**Beef, pork, horse**	☐	identification of species, relative amount beef [%], relative amount pork [%], relative amount horse [%]		
1121057	**Porcine and beef DNA in gelatine**	☐	identification of the animal species pork, identification of the animal species beef		
1121096	**Porcine DNA in Candy**	☐	identification of the animal species pork		

[*] = Sometimes we used more than one method per parameter. The values of the germ contens varies for each material from 10^2 to 10^5 KbE/g or KbE/ml and can be asked before order.

Reference material - immunological, molecular biological & microbiological

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

Art. no.	material description		Parameters [*]	risk group	additional information / packaging unit / price:
					on request: info@drrr.de
Egg products					
2201037	**Enumeration of Enterobacteriaceae in egg products**	☐	Enterobacteriaceae [cfu/g], aerobic total count [cfu/g]	**risk group 1**	
2201056	**Detection of Salmonella spp. in egg products**	☐	Salmonella spp. (pos./neg.)	**risk group 2**	
2201057	**Enumeration of E. coli in egg products**	☐	E.coli [cfu/g], aerobic total count [cfu/g]	**risk group 1**	
Fish & seafood					
2201047	**Fish and seafood - detection Yersinia enterocolitica**	☐	Yersinia enterocolitica (pos./neg.)	**risk group 2**	
2201060	**Fish and seafood - detection of Salmonella spp.**	☐	Salmonella spp. (pos./neg.)	**risk group 2**	
Infant formula					
2201093	**Enterobacteriaceae infant formula (powder) qualitative**	☐	Enterobacteriaceae (pos./neg.)	**risk group 1**	
Food matrices (other)					
2201050	**Detection of Salmonella spp. in spices**	☐	Salmonella spp. (pos./neg.)	**risk group 2**	
2201052	**Ready-to-eat meals - detection of Listeria**	☐	L. monocytogenes qualitative (pos./neg.)	**risk group 2**	
2201059	**Salmonella spp. Herbs**	☐	Salmonella spp. (pos./neg.)	**risk group 2**	
Animal feed					
2201053	**Enumeration von Clostridia in animal feed**	☐	sulfite-reducing Clostridia (vegetative) [cfu/g], lactobacilli (anaerobic) [cfu/g], anaerobic mesophilic sulfite-reducing spores [cfu/g], anaerobic mesophilic total spores (nonselective) [cfu/g]	**risk group 2**	
2201054	**Detection of Salmonella spp. in animal feed**	☐	Salmonella spp. (pos./neg.)	**risk group 2**	
2201109	**Detection of Listeria spp. in animal feed**	☐	Listeria spp. qualitative (pos./neg.)	**risk group 2**	
Honey and beeswax					
1121078	**GMOs in honey**	☐	detection of screening elements P-35S, T-NOS and P-FMV		

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Reference material - immunological, molecular biological & microbiological

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

Art. no.	material description		Parameters [*]	risk group	additional information / packaging unit / price:
	Fruit & vegetables products				on request: info@drrr.de
2201029	**Moulds fruit preparation quantitative**	☐	moulds [cfu/g]	**risk group 1**	
2201030	**Moulds fruit preparation qualitative**	☐	moulds qualitative (pos./neg.)	**risk group 1**	
2201031	**Yeasts fruit preparation quantitative**	☐	yeats [cfu/g]	**risk group 1**	
2201032	**Yeasts fruit preparation qualitative**	☐	yeats qualitative (pos./neg.)	**risk group 1**	
2201033	**Enumeration of Listeria in vegetables**	☐	L. monocytogenes [cfu/g], aerobic total count [cfu/g]	**risk group 2**	
2201034	**Detection of Listeria in vegetables**	☐	L. monocytogenes qualitative (pos./neg.)	**risk group 2**	
2201067	**Enumeration of osmophilic yeasts in sweets**	☐	osmophilic yeasts [cfu/g], aerobic total count [cfu/g]	**risk group 1**	
2201068	**Enumeration of osmophilic moulds in sweets**	☐	osmophilic moulds [cfu/g], aerobic total count [cfu/g]	**risk group 1**	
2201102	**Enumeration of yeasts in fruits**	☐	yeasts [cfu/g], aerobic total count [cfu/g]	**risk group 1**	
2201103	**Enumeration of moulds in fruits**	☐	moulds [cfu/g], aerobic total count [cfu/g]	**risk group 1**	
	Nonalcoholic beverages				
2201035	**Enumeration of E. coli in fruit juice**	☐	E.coli [cfu/g], aerobic total count [cfu/g]	**risk group 1**	
2201058	**Alicyclobacillus spp. fruit juice concentrate**	☐	Alicyclobacillus spp. (pos./neg.)	**risk group 1**	
2201069	**Enumeration of yeasts in fruit juice concentrate**	☐	yeasts [cfu/g], aerobic total count [cfu/g]	**risk group 1**	
2201070	**Enumeration of moulds in fruit juice concentrate**	☐	moulds [cfu/g], aerobic total count [cfu/g]	**risk group 1**	
2201071	**Enumeration of lactic acid bacteria in fruit juice**	☐	lactic acid bacteria (aerobic) [cfu/g], aerobic total count [cfu/g]	**risk group 1**	
2201072	**Acetic acid bacteria fruit juice concentrate**	☐	acetic acid bacteria [cfu/g], aerobic total count [cfu/g]	**risk group 1**	
2201090	**Spoiling agents in fruit juice concentrate & compounds**	☐	spoiling organism quantitative [cfu/g], aerobic total count [cfu/g], spoiling organism qualitative	**risk group 1**	

[*] = Sometimes we used more than one method per parameter. The values of the germ contens varies for each material from 10^2 to 10^5 KbE/g or KbE/ml and can be asked before order.

Reference material - immunological, molecular biological & microbiological

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

Art. no.	material description		Parameters [*]	risk group	additional information / packaging unit / price:
	Mineral water and table water				on request: info@drrr.de
2221011	**Aerobic total count mineral water and table water**	☐	aerobic total count 37°C [KbE/ml], aerobic total count 20°C [KbE/ml]	**risk group 1**	
2221012	**Detection fecal streptococci in mineral- and table water**	☐	streptococci (faecal) qualitative (pos./neg.)	**risk group 1**	
2221013	**Detection E. coli in mineral- and table water**	☐	E.coli qualitative (pos./neg.)	**risk group 1**	
2221022	**Detection coliform bacteria in mineral- and table water**	☐	Coliforms qualitative (pos./neg.)	**risk group 1**	
2221014	**Detection Ps. aeruginosa in mineral- and table water**	☐	Ps.aeruginosa qualitative (pos./neg.)	**risk group 2**	
2221015	**Sulfite-reducing, spore-forming anaerobes mineral water**	☐	sulfite-reducing, spore-forming anaerobes qualitative (pos./neg.)	**risk group 2**	
	Cocoa and chocolate				
2201049	**Detection of Salmonella spp. in chocolate**	☐	Salmonella spp. (pos./neg.)	**risk group 2**	

[*] = Sometimes we used more than one method per parameter. The values of the germ contens varies for each material from 10^2 to 10^5 KbE/g or KbE/ml and can be asked before order.

order form reference material

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

Quantity	material type / material description / article no.

For questions and suggestions do not hesitate to contact the DRRR-team!

+49(0)831/960 878-0

info@DRRR.de

For reference materials labelled with "risk group 2, or 3" we need a permission or an exemption for working with pathogenic microorganisms of your lab if existing in your country (e.g. "infection protection law (IfSG)" in Germany).**

Please notice that we process orders only at a minimum order value of 50 €.

☐ An offer with the total costs is needed

☐ A Purchase order from the purchasing department will follow

Order by e-mail: **info@DRRR.de**

Hereby we confirm obligatorily the order for the reference materials

	DRRR-customer number
	company
	additional line
	contact person
	street
	post code / city
	country
	email
	VAT-ID (EU)

Date:

Deutsches Referenzbüro
für Ringversuche und Referenzmaterialien GmbH
Reinhartser Straße 31 | 87437 Kempten
Tel.: +49 (0)8 31/960 878-0 | Fax: +49 (0)8 31/960 878-99
www.DRRR.de | info@DRRR.de

ODIN - proficiency testing online

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

Simply brilliant, your proficiency testing with ODIN (Online Data Information Network).

• Fast and easy online registration / online announcement in our online catalogue

• Direct management and booking of the proficiency testing

• Overview about the registered proficiency testing schemes

• Fast and secure submission of your results via ODIN

• Online access to individual customers reports and certificates

• Supervisor rights available to overview all PTs of a multi-site company

• Saving of costs through booking and submission of your results via ODIN

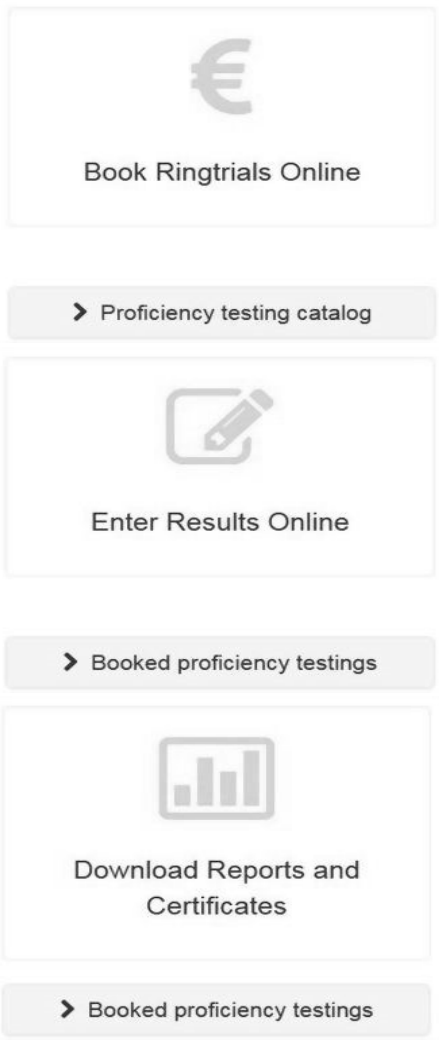
Secure payment with IRIS (Internet Remuneration Information Service).

• Easy and safe payment by credit card

• Overview about all invoices

• Fast and secure online access

You can also pay your invoice via banktransfer or bank check.



Proficiency testing organisation

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

• A precise planning and organisation of each proficiency testing round

• 2 weeks before we will dispatch the samples you will get an announcement with the proficiency testing details

• According to our requirements, you will receive suitable sample material for the respective proficiency testing scheme.

We reserve the right to have an external subcontractor carry out the sample purchase and any necessary testing.

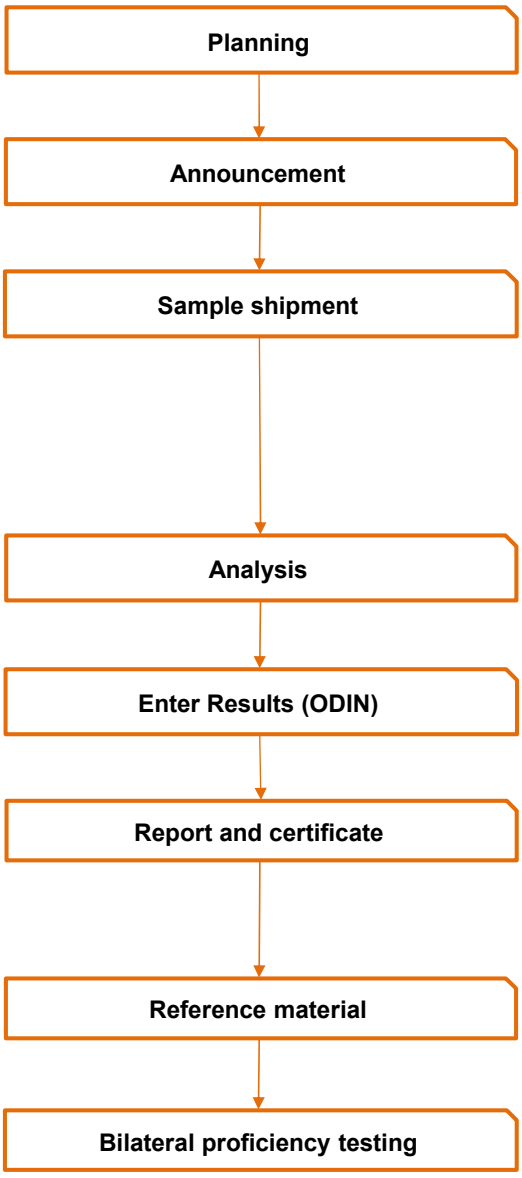
• After receiving the samples you will have a period of approximately 4 weeks for analysing.

• Mail back the results via internet by using our result sheets in an Excel file or fill out our result sheets online in ODIN

• At the latest 3 weeks after the deadline you will get the report (optional by login in ODIN, as hardcopy by regular mail or as pdf-file by e-mail) incl. participation certificate with overview of your lab performance

• After the proficiency testing we can offer you reference materials

• Possibility to perform a bilateral proficiency testing (bPT)



Benefits of proficiency testing

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

Why take part in proficiency testing?

• Participation in proficiency testing schemes is required by international standards or national facilities, organizations and customers

• Participants can compare, assure and improve their own performance and quality against other laboratories worldwide

• Laboratories can recognize how well they have been completed with the applied method compared to the other laboratories

• Saving on the costs of testing

• Unquestionable lab performance towards customers, authorities and certification authorities

• Saving on the costs of lab development and maintenance

• Saving on the costs of lab development and maintenance

• Saving on production costs by avoiding waste of raw material

Your benefits in DRRR proficiency testing schemes

• Objective and independent impression of your quality and your performance of your routine testing method compared to the other participating laboratories

• Saving the costs, because you have the opportunity to analzye more samples and more parameters in one proficiency testing

• External demonstration of your performance with the results of the proficiency testing

• Build up of your own external quality assurance system with our statistical tools (contains statistical control charts, MS-Excel evaluation files and reference materials). With these tools incorporated your external quality assurance rays unmatched confidence

• Detailed planning and organization of your proficiency testing and an easier, faster and better communication with us

Image source:
iStock.com/3dts

Statistical methods

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

We work according to:

- ISO Guide 31 / 35
- DIN EN ISO 17034
- DIN EN ISO/IEC 17020 / 17025 / 17043
- ISO 13528

Homogeneous and stable sample material

Laboratory performance:

by calculation of the following paramters:

- z-score
- z'-score
- CRD-Wert

Calculation of precision data acc. to ISO 5725-2 in many proficiency testing schemes

Statistical models:

Depending on the type of the distribution of the data, different statistic models are used:

- Conventional statistics (all values)
- Conventional statistics (no outliers)
- Robust statistics
(Hampel estimator, Q-method)
- Robust statistics
(Median, MAD/nIQR)
- Expert laboratory (expert decision)

Selection of statistical method with the chi²-fit test

Method-specific evaluation according to the reference method (if available)

Additional extended method evaluation (in case data are available)

z'-score > 2: What to do?

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

You are not satisfied with your laboratory performance: What can you do?

Due to your showed laboratory performance you have been asked by the accreditation body, the monitoring authority or your customer to initiate measures to improve your laboratory performance. These measures are often connected with considerable efforts in the laboratory and you only have a short time frame. In many cases the proof of a successful measure processing, by participation in a new proficiency testing round, is only possible in the following year. Until now it does not exist a possibility for a spontaneous performance review to equalize a previous unsatisfactory proficiency testing result.

The bilateral proficiency testing (bPT)!

You can book and perform individually and flexibly the bilateral proficiency testing during a determined time period.
You receive a proficiency testing sample for analyzing. You submit the results of the testing. After that you will get your proof of performance as a z'-score calculation in the form of a certificate within 1 - 2 weeks.

The performance evaluation refers to the previous regular proficiency testing, so that you can connect the bPT to the regular proficiency testing round. The used sample material is derived from a previous proficiency testing round and provides the possibility of a comparable performance evaluation with the regular proficiency testing.

Your terms and conditions:

Participation in a bPT is open to all laboratories. Prior participation in our regular proficiency tests is not necessary.

The report of this proficiency testing is not older than ten weeks. You register within these ten weeks for the bPT and the performance is confirmed by the DRRR. The testing period is dependent on the technical factors (parameter, matrix etc.) and will be agreed individually*. When this time is over after the sample shipment and you do not have sent us your results in this time, we can not evaluate your results and issue a certificate for you.
(* normally not longer than 1 - 2 weeks)
The bPT is not in the scope of accreditation of the DRRR. The realization of the bPT depends on the availability of the material.

Costs bPT

The costs are identical to the costs of the respective proficiency test from our standard program (see ODIN) plus shipping costs.

Alternative you can also order reference material.

quality management / quality assurance

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

We have collected wide experience in building up and operating process orientated quality management systems. Our experience is based on an intensive quality management qualification (DQG –EOQ quality manager).
Feedback of our costumers gives us a wide overview about the various requirements that companies have to pass at audit situations. As a qualified and examined auditor (DGQ-EOQ auditor quality, TGA) we are capable to estimate a company from different perspectives if quality management system is fit for audit and following we can show potentials for improvement.

On the basis of our international activities we also have experience in building up and implementation of quality management systems in developing countries. We place our services at your disposal for international questions.

Please do not hesitate to contact us.

We offer assistance for the following questions:

- building up process orientated quality management
- building up of a secure testing agent system
- assessment of quality systems in preparation for audits
- advice in operating effective quality management systems

With our expertise in interpreting ISO 9001 over IFS to DIN 17025 we serve companies of food economy and laboratories.

seminars / training / consulting

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

IR-Seminar

The IR-seminar explains how to analyze different kind of food by IR spectroscopy. Furthermore specific peculiarties for the IR calibartion of selected food will be discussed. The specific peculiarties of the calibration will be explained intensify. How to calibrate? When you have to update the calibration? What is the cause of measurement problems?

The seminar will be complemented by theoretical exercises on IR spectroscopy. In the practical excericise calibration data sets will be testes for suitability and critical data sets will be identifed.

Sensory seminar

The importance of the sensory in the food stuff industry will be explained and clarified in practice. The current state of new tastes is presented. Furthermore the participant will be enabling to apply the sensory testing methods. The use of sensory methods will be explained and on the basis of various sensory materials implemented.

The sensory measurement uncertainty of each participant will be determined at a practical example.

User-Workshop

Typical questions in the chemical and microbiological analysis of food, especially dairy products are presented and possible solutions will be demonstrated.

Furthermore efficient ways to increase the laboratory quality will be presented. The seminar is accompanied by the practical experience of users.

A lot of space for the exchanging of knowledge and experience is provided at the User-Workshop. Therefore some experts are available as contact persons.

Statistics seminar for beginners

This seminar presents the Binomial-, Poisson- and Normal distribution and the application of them. Problem cases and the classis misinterpretation due to a false outlier treatment by the application of the Normal distribution are shown.

The seminar is complemented by practical exercises with the notebook.

Statistics seminar for advanced users

This seminar presents the Shapiro-Wilk-Test, qui²-adaptation test, Median and MAD (Median absolute deviation) and their application. Furthermore the participants will be informed about the robust standard deviation after Q-method and the robust average after Hampel.

The seminar is complemented by practical exercises with the notebook.

seminars / training / consulting

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

Implementation of DIN EN ISO/IEC 17025 in food laboratories

The participants will learn all items to implement a successful internal audit. Furthermore typical errors of the implementation of the audit will be targeted and avoidance strategies are communicated. The reliable identification of the deviation in audits and their successful processing in the form of measures will be trained.

You will benefit of the extensive experience of the DRRR, because the DRRR go through the audit situation in a perspective of 360 ° as an auditor, as an audited person and as a neutral expert.

Inhouse-Training

We consider lectures, training and seminars as in important duty. Not primary concerning commercial possibilities but by reason that the knowledge transfer is the most important item in every department of our society.

- Seminar and training (one-day) of handling and implementation of proficiency testing
- Seminar and training (one-day) of operating control charts
- Seminar and training of sensory (customised product sensory)

For special requirements we also offer customised training programmes.

For questions about contents and conditions do no hesitate to contact us.

Sales terms and delivery conditions

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

Terms of payment

Our prices are net prices (plus 19% value added tax). Customers from European countries can provide us with their EU-VAT-Identification number, then they will be exempt from German value added tax.
Terms of payment: 8 days net, without deduction
Fees for specially required customs documents such as import permits or similar will be invoiced according to time and effort.

Our bank details:
Raiffeisenbank in Allgäuer Land / bank code 733 692 64
Account 102350 / IBAN DE 94733692640000102350
BIC code: GENO DEF1DTA
Sales tax ID no. DE254613132
tax number 127/124/32207

Terms of delivery

Shipping costs for reference materials and proficiency tests will be invoiced according to time and effort. All samples and packaging materials are the property of the DRRR. Samples that are used for non-destructive testing and are therefore not subject to destruction in the course of the proficiency test can be reclaimed by the DRRR upon request. The DRRR shall bear the shipping costs for the return transport if the materials are reclaimed.

Proficiency tests or reference materials marked “frozen” are shipped with our ADR safety tested frozen packaging system. A packaging fee is charged for the polystyrene box including cooling accumulators and air bubble film as well as the protective outer packaging. Frozen materials are shipped by express service. With the delivery of reference materials, you will receive a quality certificate with the details of the respective reference values as well as associated uncertainties.

Terms of delivery (risk group 1, 2 and 3**)

Proficiency tests or reference materials marked with “Risk Group 1” are not subject to any participation restrictions according to § 44 IfSG (Infektionsschutzgesetz).

For proficiency tests or reference materials marked with “risk group 2, or risk group 3**”, we need a permission from your laboratory according to § 44 IfSG (Infektionsschutzgesetz) or similar. Please enclose a copy of the permission with your registration or order.

Our general terms and conditions (Allgemeine Geschäftsbedingungen) are valid!

General terms and conditions

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

The German reference office for proficiency testing and reference materials GmbH (hereinafter referred to as DRRR) for freely agreed services, in particular testing, training and expert activities as well as reference materials.

§ 1 General terms and conditions

The client acknowledges the General Terms and Conditions and price lists valid at the time of placing the order. Deviating terms and conditions of individual clients cannot be accepted.
Collateral agreements, promises and other declarations by the employees of the DRRR are only binding if they are expressly confirmed in writing by the DRRR. This shall also apply to amendments to this clause.
If individual regulations within this contract or its components are ineffective, this does not affect the validity of the remaining regulations. The contracting parties shall have a duty, acting in accordance with the principles of good faith, to replace any invalid provision by one which is valid and which produces the same economic outcome as that intended by the invalid provision and providing that such replacement does not result in any change to the content of the contract; the same shall also apply analogously to any matter which requires regulation but for which no provision is made in these Terms and Conditions.

§ 2 Execution of the order

The orders accepted by the DRRR shall be carried out or expert opinions shall be prepared in accordance with the recognized rules of technology and – unless otherwise agreed in writing – in the manner customary at the DRRR. No responsibility shall be assumed for the correctness of the safety programs or safety regulations on which the tests are based, unless expressly agreed otherwise in writing.
The scope of the DRRR's work shall be specified in writing when the order is placed. If the proper execution of the order results in changes or extensions to the specified scope of the order, such changes or extensions shall be agreed in writing prior to execution. If the Customer can no longer be reasonably expected to adhere to the contract with regard to the changes or extensions, the Customer shall in this case be entitled to withdraw from the contract. However, according to § 649 BGB, the client must pay the agreed remuneration or, in the absence of an agreement, an appropriate remuneration.
The contractual services of the DRRR are deemed to have been rendered upon preparation of the respective final reports or expert reports.
A seminar registration can be cancelled free of charge for up to 6 weeks, after which the customer will be invoiced for the costs of the participants depending on the time and effort involved.

The following cancellation conditions apply to the cancellation of a proficiency testing:

Cancelation notification period:	Permanent registration (D)
	single (one-time) registration (E)
up to 3 months before the proficiency testing	no costs (D)
	50,00 € (E)
3 months before the proficiency testing start	50,00 € (D)
	half proficiency testing price (E)
sample shipment – deadline of the results	complete price of the proficiency testing and any further incurred costs (D & E)

§ 3 Deadlines

The order deadlines specified by the DRRR shall not be binding unless their binding nature has been expressly agreed in written form.

General terms and conditions

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

§ 4 Warranty and liability

The integrity of the sample material to a defined condition is only guaranteed until the first border crossing in the case of foreign shipments.
Safety note: When sending materials of risk group 2, the DRRR must receive a letter from the recipient stating that the recipient is authorized to handle hazardous materials (e.g. pathogenic germs).
The DRRR's warranty only covers the services expressly commissioned to it pursuant to Section 2.
No warranty is thereby assumed for the correctness and functioning of the relevant overall system, measuring instruments or materials to which the examined or tested samples belong; in particular, the DRRR bears no responsibility for packaging, material selection and construction of the examined systems, measuring instruments or assemblies, unless these issues are expressly the subject of the order.
Even in the latter case, the warranty obligation and legal responsibility of the manufacturer are neither limited nor assumed.
The warranty obligation of the DRRR is limited to the rectification of an error or defect or, in the absence of a warranted characteristic, to the achievement of this characteristic within a reasonable period of time. If the rectification or creation of the characteristic fails, i.e. if it becomes impossible or unreasonable for the Customer or is refused or unduly delayed by the DRRR, the Customer shall be entitled to demand a reduction in the remuneration or rescission of the contract, at its discretion.
The DRRR shall not be liable for any work performed by the Customer in the event of incorrect proficiency tests or reference materials.
The DRRR only assumes liability for certain properties, in particular for the fact that the service is suitable for the purposes of the Customer, if a corresponding assurance of the properties in question has been given. Any liability for consequential damages from positive breach of contract due to warranted characteristics is excluded, unless the warranty was intended to protect against such consequential damages. Claims for damages of the client from §§ 463, 635 BGB due to the lack of assured characteristics remain unaffected.
If an error or defect that does not represent the absence of a warranted characteristic is due to a circumstance for which the DRRR is responsible, the DRRR shall only be liable for any damage incurred by the Customer as a result thereof per order up to a maximum amount that corresponds to the value of the order agreed in accordance with Section 2.
The materials may only be used for the corresponding scientific purpose by trained qualified personnel. The DRRR is in no case responsible and liable for used, unused or unusable samples.
The samples are intended for analytical purposes only. The DRRR assumes no liability if the samples are not used for the intended analytical purposes.
All materials are definitely not suitable for human consumption unless they are sensory materials. Oral ingestion of materials not intended for sensory purposes can be harmful to health.
In the case of sensory materials, it is the responsibility of the test persons themselves to check whether they can test the materials with regard to allergies. The ingredients of the sensory materials are declared.
All samples and packaging materials are the property of the DRRR. Samples that are used for non-destructive testing and are therefore not subject to destruction in the course of the interlaboratory comparison can be reclaimed by the DRRR upon request. The DRRR will bear the shipping costs for the return transport, if the materials are reclaimed.
The analytical properties of the material can only be guaranteed if the transport, storage and use conditions specified by the DRRR are observed.
For frozen samples, the DRRR only guarantees that the samples will be treated in accordance with the material properties stated in the data sheet. For frozen samples delivered to countries outside the EU, we can only guarantee the sample properties up to the first customs clearance point at the respective EU border.

§ 5 Exclusion of further liability and claims

The risk (transport and remuneration risk) shall pass to the Customer as soon as the goods have left the DRRR, regardless of whether the goods are transported by the Customer's own or third-party means of transport.
Claims for damages by the client are excluded. This does not apply to intent, gross negligence, breach of essential contractual obligations of the DRRR or the lack of properties guaranteed in writing.
All further claims of the client for direct and indirect damage – for whatever legal reason – in particular claims for damages due to positive breach of contract or from tort and for compensation for damage that did not occur on the object of the order itself are excluded. Irrespective of this, the client is obliged to take out the usual insurance against direct and indirect damage.

General terms and conditions

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

§ 6 Remuneration and payment terms

Unless otherwise stated, the prices are in euros and do not include value added tax. This will be invoiced separately at the currently applicable rate in accordance with the applicable tax regulations.
The goods remain the property of DRRR until they have been paid for in full by the customer.
The fees according to the DRRR's currently valid List of Services shall apply to the calculation of the services unless a fixed price or another basis of assessment has been expressly agreed in writing. In the absence of a valid specification of services, individual contractual arrangements shall be made in each case.
Advances on costs can be requested. Partial invoices can also be issued in accordance with the services rendered. Partial invoices need not be marked as such. The receipt of an invoice does not mean that the DRRR has fully invoiced the order.
The fees are due for payment immediately after invoicing, at the latest by the date printed on the invoice (8 days net, without deduction). Unless another arrangement has been made. If payment is made at a later date, default interest of 2% above EURIBOR will be charged on the outstanding invoice amount for the period between the due date and receipt of payment.
Objections to the invoices of the DRRR must be notified in writing within a preclusive period of 14 days after receipt of the invoice, stating reasons.

§ 7 Confidentiality and copyright

The DRRR reserves the copyrights to the expert opinions, test results, calculations, etc. prepared by it.
The DRRR and its employees may not unauthorizedly disclose or exploit business and operating relationships that come to their knowledge in the course of their work.
The DRRR may take copies for its files of written documents that have been made available to the DRRR for inspection and that are of importance for the performance of the assignment.
If the proficiency test report and the laboratory code are sent by e-mail, no guarantee can be given that confidentiality will be ensured.

§ 8 Place of jurisdiction, place of performance, applicable law

The place of jurisdiction for the assertion of claims for both parties to the contract is Kempten, provided that the conditions according to § 38 of the German Code of Civil Procedure are met. This applies in particular to dunning proceedings.
The place of performance for all obligations arising from the contract is Kempten, the contractor's registered office.
The contractual relationship and all legal relationships are subject exclusively to the law of the Federal Republic of Germany applicable between domestic contracting parties, excluding the Uniform Law on the Sale of Goods and the United Nations Convention on Contracts for the International Sale of Goods.

§ 9 Guarantee of services and goods from cooperation partners

For reference materials sold on behalf of our cooperation partners, the following conditions apply with regard to liability and warranty:
The liability of our cooperation partners, their legal representatives and vicarious agents is limited to cases of intent, gross negligence, absence of a warranted characteristic and breach of an obligation, the non-compliance of which would endanger the purpose of the contract. The liability for proven damages due to grossly negligent conduct is limited to the amount of the contractual remuneration; no liability is assumed for consequential damages. Liability is limited to the use of the reference materials for the purposes described in the respective certificate.
Our cooperation partners guarantee the application of scientific diligence as well as compliance with the recognized rules of technology.
Our cooperation partners are entitled to rectify any defects that occur. If the rectification of defects fails, the client is entitled to demand a reduction of the remuneration or cancellation of the contract at his discretion. Further warranty claims are excluded.
The warranty is limited to the stated expiration date of the reference materials.
This applies to: ieLab, TGZ AQS Baden-Württemberg