

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

Consumer goods and Packaging

product catalogue 2024 / 2025



Image source: iStock.com/279photo chemical-physical

organoleptic

In the fields:

Consumer goods / packaging in food contact such as:

- Films
- Paper and board
- Glass / canning / cans

Contamination from packaging

Consumer goods in body contact such as:

- Textiles
- Cosmetics
- Tattoo ink
- Jewellery

Other consumer goods such as:

- Printing inks
- Toys
- Cleaning agent
- Leather
- E-cigarettes

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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.

Accreditation ISO/IEC 17043:2010 (A2LA)

The DRRR is an accredited proficiency testing provider by A2LA according to ISO/IEC 17043:2010. 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).

Accreditation DIN EN ISO/IEC 17043:2010 (DAkkS)

The DRRR is an accredited proficiency testing provider by DAkkS according to DIN EN ISO/IEC 17043:2010. The accreditation is valid only for the scope listed in the annex of the accreditation certificate [D-EP-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.

Customer support

We provide advice to our customers in all question of validation of chemicalphysical, microbiological, organoleptic and physical-mechanical analysis or statistical questions. Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

More than 500 PT's in 2023

Accredited PT-provider

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High-quality reference material

Any time competent contact persons

Perfluorinated compounds (PFAS)

2024 the DRRR GmbH offers you a comprehensive proficiency testing program in the field of PFAS. These very stable and in the environment persistent chemicals are used in many different areas. They have immunosuppressive effects on humans and some of these substances can act as endocrine disruptors and are carcinogenic. Therefore, EFSA has set a toxicological threshold of 0.0044 μ g/kg bw per week for the 4 main PFAS representatives in 2020 for food. More recently, the EU has introduced maximum levels for PFAS for the first time (EU 2022/2388) and guidance values (EU 2022/1431) for different food groups. In addition, the topic has been strongly covered by the media and has reached the awareness of the public.

We offer proficiency tests in all relevant matrix groups: Drinking Water, Feed, Fish and Seafood, Infant Food, Environment, Egg Products, Textiles, Leather and Paper / Cardboard. The PFAS concentrations are adapted to the matrix (ng/kg, µg/kg, mg/kg) and the following PFAS are requested: CAS 1763-23-1 (perfluorooctanesulfonic acid), CAS 335-67-1 (perfluorooctanoic acid), CAS 375-95-1 (perfluorononanoic acid), CAS 355-46-4 (perfluorohexanesulfonic acid).

plastic - screening of SVHC and plastic - screening of NIAS

The two new PTs allow you to validate your screening procedure for substances of very high concern (SVHC) and for unintentionally added substances (NIAS) via a proficiency test. The test samples should first be examined qualitatively using a screening method. Positive results can be determined quantitatively.

Matrix Rubber - Total migration and specific migration

The five new PTs on migration from natural and synthetic rubbers cover important parameters of Resolution ResAP (2004) 4 (1) issued by the European Council and the BfR recommendation XXI/1 (2). Both, total migration under different contact conditions and specific migration of metals and a common antioxidant are part of the new DRRR PT program.

(1) ResAP (2004) 4: Rubber products intended to come into contact with foodstuffs (version 1; 10.06.2004)
(2) BfR: Recommendation XXI/1. Commodities based on natural and synthetic rubber in contact with food. (version 01.02.2023)

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Simply brilliant, your proficiency testing with ODIN (Online Data Information Network).	€
 Fast and easy online registration / online announcement in our online catalogue 	Book Ringtrials Online
 Direct management and booking of the proficiency testing 	
 Overview about the registered proficiency testing schemes 	Proficiency testing catalog
 Fast and secure submission of your results via ODIN 	
 Online access to individual customers reports and certificates 	Enter Results Online
 Supervisor rights available to overview all PTs of a multi-site company 	Booked proficiency testings
• Saving of costs through booking and submission of your results via ODIN	
Secure payment with IRIS (Internet Remuneration Information Service).	Download Reports and Certificates
 Easy and safe payment by credit card 	Booked proficiency testings
Overview about all invoices	

You can also pay your invoice via banktransfer

• Fast and secure online access

or bank check.

Proficiency testing organisation



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

We work according to:

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

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Laboratory performance:

by calculation of the following paramters:

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

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)

Homogenous and stable sample material

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

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)



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.

New: 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.

Features

The inspectors of the DRRR-team are represent in different national and international committees and working groups. Thus we ensure that the DRRR quality assurance systems are available for new and up-to-date questions in all cases, if the laboratories start to establish the routine method. Due to the intensive professional exchange in the committees, it is ensured that the proficiency testing design is conformed to the new developments and the laboratories have the highest possible benefits in a participation in the proficiency testing. national and international committees and working groups

Testing with matrix reference

Whenever possible, real matrices e.g. films, textiles, cardboard and cosmetics are used. This ensures that our proficiency testing schemes have an actual matrix reference and the sample preparation is part of the proficiency testing.

Matrix reference

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.

Laboratory Measurement

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

Evaluation

Market-leading statistical evaluation

chemical-physical proficiency testing

For your registration we recommend to use our online catalogue (ODIN) or the registration forms on our homepage (<u>www.DRRR.de</u>). You can also use the registration forms on page 32 of this catalogue.

films

Art. No.	proficiency testing type [A]	requested parameters	period	To view pricing information visit our online Portal:
2010073	Plastic - overall migration (one-sided contact) (EN 1186-3)	overall migration in food simulating matrix: ethanol 10%; 20%; 50%, acetic acid 3%, distilled water, vegetable oil	Oct-24	Login or register
2010304	Plastic - overall migration (total immersion) (EN 1186- 3)	overall migration in food simulating matrix: ethanol 10%; 20%; 50%, acetic acid 3%, distilled water, vegetable oil	Nov-24	
2011207	Plastic - overall migration (total immersion) (EN 1186- 3) (round 2)	overall migration in food simulating matrix: ethanol 10%; 20%; 50%, acetic acid 3%, distilled water	May-24	
2010570	Plastic - overall migration (article filling) (EN 1186-3)	overall migration in food simulating matrix: ethanol 10%; 20%; 50%, acetic acid 3%	Jul-24	
2010572	Plastic - overall migration	overall migration in food simulating matrix:	Mar-24	
2010572	immersion) (EN 1186-3)	ISO-octane, ethanol 95%	Mar-25	
0040574	Plastic - overall migration at	overall migration in food simulating matrix:	Mar-24	
2010574	13)	olive oil	Mar-25	
2010622	Plastic, silicone - overall	overall migration by using Tenax (MPPO)	Jan-24	
2010022	migration using MPPO	as a simulant	Jan-25	
2010311	Plastic - overall migration (pouch) EN 1186-3, EN 1186- 2	overall migration in simulants: ethanol 10%, 20%, 50%, acetic acid 3% and vegetable oil	Sep-24	
2011003	Plastic - overall migration (fatty test food, one-sided contact) (EN 1186-3)	Food simulants: ISO octane, 95% ethanol	Oct-24	
2010075	Plastic - Specific migration: caprolactam	specific migration of caprolactam in food simulating matrix: ethanol 10%; 20%; 50%, acetic acid 3%, distilled water, vegetable oil	Dec-24	
2010306	Plastic - Specific migration: 1- octene	specific migration of 1-octen in food simulating matrix: ethanol 50%, 95% ,vegetable oil	Nov-24	
2010308	Plastic - Specific migration: acrylonitrile (EN 13130-3)	food simulating matrices: ethanol 10%, acetic acid 3%, distilled water, vegetable oil	Aug-24	
2010310	Plastic - Specific migration: terephthalic acid	specific migration of terephthalic acid in food simulating matrix: Ethanol 10%; 50%, acetic acid 3%, distilled water, vegetable oil	Aug-24	
2010628	Plastic - Specific migration: melamine	specific migration of melamin in food simulating matrix: ethanol 10%, acetic acid 3%, distilled water, vegetable oil	Aug-24	
0040055	Plastic - Specific migration	specific migration of vinyl acetate in food simulating matrix:	Mar-24	
2010630	vinyl acetate	ethanol 10%, acetic acid 3%, distilled water, olive oil	Mar-25	

films

Art. No.	proficiency testing type [A]	requested parameters	period	To view pricing information visit our online Portal:
2010251	Plastic - Specific migration: acrylonitrile trimers	acrylonitrile trimers	Aug-24	Login or register
2010401	Plastic - Specific migration: primary aromatic amines 1	CAS 95-53-4 (o-toluidine), CAS 92-87-5 (benzidine), CAS 62-53-3 (aniline), CAS 101- 77-9 (4,4'-diaminodiphenylmethane) and CAS 90-04-4 (o-anisidine) in simulant distilled water, 3% acetic acid	May-24	
2010403	Plastic - Specific migration: primary aromatic amines 2	CAS 90-04-0 (2-methoxyaniline), CAS 106- 47-8 (4-chloroaniline), CAS 91-59-8 (2- napthylamine) and CAS 119-93-7 (3,3'- dimethylbenzidine) in simulant 10% ethanol and 15% ethanol	Dec-24	
2010464	Plastic - Specific migration: metals part 1	specific migration of antimony, arsenic, cadmium in simulant acetic acid 3%, water	Oct-24	
2010466	Plastic - Specific migration: metals part 2	specific migration of total chromium, lead, iron in simulant acetic acid 3%, water	Oct-24	
2010115	Plastic - Identification of mono-layer plastic films	qualitative identification of mono films	Sep-24	
2010167	Plastic - Identification of	e.g. PA6. PA6.6. PA11. PA12	Mar-24	
	different PA types		Mar-25	
2010210	Plastic - Identification of	qualitative determination of plastic	Mar-24	
	granulate	granules	Mar-25	
2010312	Plastic - Identification of of multi-layer plastic films	qualitative identification of multi-layer films	Mar-24 Mar-25	
2010963	plastic - Identification of microplastic	qualitative determination of microplastics in water	Dec-24	
2010965	Plastic - Elemental determination by XRF	arsenic, total bromine, cadmium, total chromium, mercury, lead, sulfur, antimony, tin, zinc	Sep-24	
2010220	Ethylene glycol in food simulants (EN 13130-7)	ethylene glycol in food simulating matrix: ethanol 10%; 20%; 50%, acetic acid 3%, distilled water, vegetable oil	Jun-24	
2010222	Di-ethylene glycol in food simulants (EN 13130-7)	di-ethylene glycol in food simulating matrix: ethanol 10%; 20%; 50%, acetic acid 3%, distilled water, vegetable oil	Jun-24	
2010578	Bisphenol A in food simulants (CEN TS 13130- 13)	testing of Bisphenol A in food simulating matrix: distilled water, acetic acid 3%, ethanol 10%	Sep-24	
2010580	Formaldehyde in food simulants (CEN TS 13130- 23)	testing of formaldehyde in food simulating matrix: distilled water, acetic acid 3%, ethanol 10%, vegetable oil	Aug-24	

chemical-physical proficiency testing

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films

Art. No.	proficiency testing type ^[A]	requested parameters	period	To view pricing information visit our online Portal:
2010632	Acrylamide in food simulants (CEN TS 13130-10)	testing of acrylamide in food simulating matrix: ethanol 10%, acetic acid 3%, distilled water, olive oil	Jun-24	Login or register
2011101	Ethylenediamine in food simulants (CEN TS 13130- 21)	ethanol 10 %, distilled water, acetid acid 3 %	Oct-24	
2011102	Hexamethylenediamine in food simulants (CEN TS 13130-21)	ethanol 10 %, distilled water, acetid acid 3 %	Oct-24	
2010322	Plastic - overall migrat on synthetic samples	determination of overall migrat in simulating matrix: ethanol 10%; 20%; 50%, acetic acid 3%, distilled water	Jul-24	
2010582	Plastic - phthalate content	DBP, BBP, DEHP, DNOP, DINP, DIDP, DEP, DMP	Oct-24	
2010584	Plastic - Vinylchloride in synthetic sample (ISO 6401)	vinyl chloride monomer	Oct-24	
2010634	acetaldehyde in mineral water	acetaldehyde	Jul-24	
2010636	Plastic - bisphenol A content	CAS 80-05-7 Bisphenol A	Apr-24	
2010638	Plastic - 1,3 butadiene content (EN 13130-4)	1,3 butadiene monomer	May-24	
2010307	Plastic - styrol oligomers in synthetic samples	CAS 1081-75-0 (1,3-Diphenylpropane), CAS 16606-47-6 (2,4-Diphenyl-1-butene), CAS 20071-09-4 (trans-1,2- Diphenylcyclobutane), CAS 18964-53-9 (2,4,6-Triphenyl-1-hexene) and CAS 26681- 79-8 (1-Phenyl-4-(1-phenylethyl)-1,2,3,4- tetrahydronaphthalene)	Dec-24	
2010405	Plastic - PAH content	CAS 91-20-3 (naphthalene), CAS 120-12-7 (anthracene), CAS 56-55-3 (benzo(a)anthracene), CAS 218-01-9 (chrysene), CAS 205-99-2 (benzo(b)fluoranthene), CAS 207-08-9 (benzo(k)fluoranthene), CAS 205-82-3 (benzo(j)fluoranthene), CAS 192-97-2 (benzo(e)pyrene), CAS 50-70-3 (benzo(a)pyrene), CAS 53-70-3 (dibenz(ah)anthracene) (at least 5 of the parameters quantitative)	May-24	
2011015	Plastic, silicone - volatile fractions	gravimetric determination of the volatile fractions	Jun-24	
2011151	plastic - screening of SVHC	screening of substances of very high concern (SVHC) quanitative and quantitative	May-24	
2011152	plastic - screening of NIAS	screening of non-intentionally added substances (NIAS) quanitative and quantitative	Jul-24	
2011153	plastic - melamine content	melamine	Dec-24	

paper / board

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Art. No.	proficiency testing type ^[A]	requested parameters	period	To view pricing information visit our online Portal:
2010318	mineral oil in cardboard	MOSH C10-C16, MOSH C16-C20, MOSH C20-C25, MOSH C25-C35, MOAH C10-C16, MOAH C16-C25, MOAH C25-C35	Nov-24	Login or register
2010180	mineral oil in low-fat and starch-rich foodstuff	MOSH C10-C16, MOSH C16-C20, MOSH C20-C25, MOSH C25-C35, MOSH C35-C40, MOSH C40-C50, MOAH C10-C16, MOAH C16-C25, MOAH C25-C35, MOAH C35-C50, MOSH C10-C50; MOAH C10-C50	May-24	
2010590	mineral oil in cocoa butter and chocolate	MOSH C10-C16, MOSH C16-C20, MOSH C20-C25, MOSH C25-C35, MOSH C35-C40, MOSH C40-C50, MOAH C10-C16, MOAH C16-C25, MOAH C25-C35, MOAH C35-C50, MOSH C10-C50; MOAH C10-C50	Jul-24	
2010245	mineral oil in cheese and milk powder	MOSH C10-C16, MOSH C16-C20, MOSH C20-C25, MOSH C25-C35, MOSH C35-C40, MOSH C40-C50, MOAH C10-C16, MOAH C16-C25, MOAH C25-C35, MOAH C35-C50, MOSH C10-C50; MOAH C10-C50	Jul-24	
2010320	mineral oil in edible fat and edible oil	MOSH C10-C16, MOSH C16-C20, MOSH C20-C25, MOSH C25-C35, MOSH C35-C40, MOSH C40-C50, MOAH C10-C16, MOAH C16-C25, MOAH C25-C35, MOAH C35-C50, MOSH C10-C50; MOAH C10-C50	Aug-24	
2011135	mineral oil in edible fat and edible oil (round 2)	MOSH C10-C16, MOSH C16-C20, MOSH C20-C25, MOSH C25-C35, MOSH C35-C40, MOSH C40-C50, MOAH C10-C16, MOAH C16-C25, MOAH C25-C35, MOAH C35-C50, MOSH C10-C50; MOAH C10-C50	Dec-24	
2010586	migration of mineral oil from	Migration of mineral oil in food simulating	Mar-24	
	cardboard	matrix: Tenax	Mar-25	
2010935	Mineral oil in jute bags	MOSH C10-C16, MOSH C16-C20, MOSH C20-C25, MOSH C25-C35, MOSH C35-C40, MOSH C40-C50, MOAH C10-C16, MOAH C16-C25, MOAH C25-C35, MOAH C35-C50	Aug-24	
2010620	Migration from paper, board using MPPO (EN 14338)	overall migration by using Tenax (MPPO) as a simulant	Nov-24	
2010640	paper, board: pH value (ISO 6588-1, ISO 6588-2)	pH value (cold extraction und hot extraction)	Nov-24	
2010642	Paper, cardboard - formaldehyde (EN 1541)	formaldehyde (cold water extract)	Jun-24	
2010644	Paper, cardboard - glyoxal	glyoxal (cold water extract)	May-24	
2010646	Colour fastness of dyed paper (EN 646)	testing with distilled water, acetic acid 3%, olive oil, alkali salt solution	May-24	
2010648	Colour fastness of fluorescent whitened paper (EN 648)	testing with distilled water, acetic acid 3%, olive oil, alkali salt solution	May-24	
2010442	Paper, cardboard - overall migration	overall migration in simulant ethanol 95%	Apr-24	

[A] = For accredited and non-accredited status please see Online portal (ODIN)

paper / board

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Art. No.	proficiency testing type ^[A]	requested parameters	period	To view pricing information visit our online Portal:
2010448	testing of benzophenone in food simulating matrix	Benzophenon in the simulant ethanol 95%	Apr-24	Login or register
2010711	Paper, cardboard - constituents (gravimetric)	dry content, residue on ignition, ash	May-24	
2010450	Paper, cardboard - DIPN (EN 14719)	DIPN (Diisopropylnaphthalin)	May-24	
2010452	Paper, cardboard - 1,3-DCP and 3-MCPD	testing with aqueous extract: 1,3-dichloro- 2-propanol, 3-monochloro-1,2-propanediol	Jun-24	
2010454	Paper, cardboard - PCBs (ISO 15318)	PCB 52, PCB 101, PCB 138	Sep-24	
2010456	Paper, cardboard - cadmium, lead in aqueous extract (EN 12498)	cadmium, lead	Jul-24	
2010460	Paper, cardboard - bisphenol S	Bisphenol S	Aug-24	
2011011	Paper, cardboard - total chlorine and organically bound chlorine (ISO 11480)	total chlorine, organically bound chlorine	Jul-24	
2011023	Pulps - Kappa number (ISO 302)	Kappa number	Jun-24	
2011024	ISO 2528	Sheet materials - Water vapour transmission rate	Oct-24	
2011025	ISO 535	Paper and board - Water absorptiveness (Cobb)	Oct-24	
2011026	ISO 5636-3	Paper and board - Air permeance (Bendtsen)	Oct-24	
2011027	ISO 5636-5	Paper and board - Air permeance (Gurley)	Oct-24	
2011028	ISO 536	Paper and board - Grammage	Oct-24	
2011029	ISO 534	Paper and board - Thickness, density, specific volume	Oct-24	
2011030	ISO 12625-3	Tissue products - Thickness	Oct-24	
2011031	ISO 12625-8	Tissue products - Water-absorption capacity	Oct-24	
2011032	ISO 12625-6	Tissue products - Grammage	Oct-24	
2011099	Paper, cardboard - aluminium	aluminium (cold water extract)	Aug-24	

[A] = For accredited and non-accredited status please see Online portal (ODIN)

paper / board

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Art. No.	proficiency testing type ^[A]	requested parameters	period	To view pricing information visit our online Portal:
2011147	Paper, board - Primary aromatic amines (EN 17163)	testing with aqueous extract: CAS 95-53-4 (o-Toluidin), CAS 92-87-5 (Benzidin), CAS 62-53-3 (Anilin), CAS 91-94-1 (3,3'- Dichlorbenzidin); CAS 90-04-0 (2- Methoxyanilin), CAS 106-47-8 (4- Chloranilin), CAS 91-59-8 (2-Napthylamin); CAS 119-93-7 (3,3'-Dimethylbenzidin)	Sep-24	<u>Login or register</u>
2011148	paper, board - phthalates (EN 16453)	testing with aqueous extract: CAS 28553- 12-0 (DINP), CAS 117-81-7 (DEHP), CAS 117- 84-0 (DNOP), CAS 26761-40-0 (DIDP), CAS 85-68-7 (BBP), CAS 84-74-2 (DBP), CAS 84- 69-5 (DIBP), CAS 131-18-0 (DPP), CAS 71888-89-6 (DIHP), CAS 117-82-8 (DMEP)	Jun-24	
2011149	paper, board - mercury in aqueous extract (EN 12497)	mercury (Hg)	Nov-24	
2011124	Paper, cardboard - perfluorinated compounds	CAS 1763-23-1 (perfluorooctane sulfonic acid), CAS 335-67-1 (perfluorooctanoic acid), CAS 375-95-1 (perfluorononanoic acid), CAS 355-46-4 (perfluorohexane sulfonic acid)	Jul-24	
2011150	MOAH - quantification acc. number of aromatic rings	MOAH quantitative by rings: 1 R, 2 R, ≥3 R; matrix: edible fat	Sep-24	

[A] = For accredited and non-accredited status please see Online portal (ODIN)

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textiles

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Art. No.	proficiency testing type ^[A]	requested parameters	period	To view pricing information visit our online Portal:
2010324	Textiles - extractable metals (EN 16711-2)	antimony, arsenic, lead, cadmium, chromium, cobalt, copper, nickel, barium, manganese, selenium, zinc	Jul-24	Login or register
2010185	Textiles - formaldehyde (ISO 14184-1)	free and hydrolised formaldehyde	May-24	
2010326	Textiles – Phosphorus flame retardants (ISO 17881-2)	tributyl phosphate (CAS No 126-73-8), o- triskresyl phosphate (CAS No 78-30-8), tris(2-chloroethyl)-phosphate (CAS No 115- 96-8), tris(2-chloro-1-methylethyl)- phosphate (CAS No 13674-84-5)	Dec-24	
2010328	Textiles - Aromatic amines from azo dyes (ISO 14362-1)	Quantitative determination of aromatic amines derived from azo dyes acc. ISO 14362-1 (at least 3)	Nov-24	
2010224	Textiles - aniline	CAS 62-53-3 (aniline)	May-24	
2010225	Textiles - 2,4-xylidine and 2,6 xylidine	CAS 95-68-1 (2,4-xylidine), CAS 87-62-7 (2,6- xylidine)	May-24	
2010226	Textiles – Alkylphenols, ethoxylates (ISO 21084)	CAS 68412-54-5 (nonylphenol ethoxylate), CAS 9002-93-1 (octylphenol ethoxylate), CAS 84852–15–3 4-(nonylphenol isomer mixture), CAS 140–66–9 (4-tert- octylphenol)	Nov-24	
2010227	Textiles – chlorophenoles	Tetrachlorophenol-, trichlorophenol-, dichlorophenol-, monochlorophenol- isomers and CAS 87-86-5 (pentachlorophenol)	Nov-24	
2010173	Textiles – organotin compounds (ISO 22744-1; 22744-2)	CAS 1118-46-3 (monobutyltin trichloride), CAS 3091-25-6 (trichlorooctylstannane), CAS 683-18-1 (dibutyltin dichloride), CAS 3542-36-7 (dioctyltin dichloride), CAS 1461- 22-9 (tributyltin chloride), CAS 639-58-7 (triphenyltin chloride), CAS 3091-32-5 (tricyclohexyltin chloride), CAS 1461-25-2 (tetra-n-butyltin)	Oct-24	
2010175	Textiles - perfluorinated compounds	CAS 1763-23-1 (perfluorooctane sulfonic acid), CAS 335-67-1 (perfluorooctanoic acid), CAS 375-95-1 (perfluorononanoic acid), CAS 355-46-4 (perfluorohexane sulfonic acid)	Oct-24	
2010179	Textiles - metal content (EN 16711-1)	chromium, nickel, cadmium, lead, copper, arsenic	Sep-24	

Proficiency Testing for mechanical textile testing can be found in the catalogue "material testing" or the online catalogue: e. g. fabric properties, functional properties, colour fastness, determination of fibre blends, laminated fabrics, personal protective equipment (PPE)

[A] = For accredited and non-accredited status please see Online portal (ODIN)

textiles

Art. No.	proficiency testing type ^[A]	requested parameters	period	To view pricing information visit our online Portal:
2010181	Textiles - phthalate content (ISO 14389)	CAS 28553-12-0 (DINP), CAS 117-81-7 (DEHP), CAS 117-84-0 (DNOP), CAS 26761- 40-0 (DIDP), CAS 85-68-7 (BBP), CAS 84-74- 2 (DBP), CAS 84-69-5 (DIBP), CAS 131-18-0 (DPP), CAS 71888-89-6 (DIHP), CAS 117-82- 8 (DMEP)	Aug-24	<u>Login or register</u>
2010527	Textiles - PAH (EN 17132)	CAS 91-20-3 (naphthalene), CAS 120-12-7 (anthracene), CAS 56-55-3 (benzo(a)anthracene), CAS 218-01-9 (chrysene), CAS 205-99-2 (benzo(b)fluoranthen), CAS 207-08-9 (benzo(k)fluoranthen), CAS 205-82-3 (benzo(i)fluoranthen), CAS 50-70-3 (benzo(e)pyren), CAS 50-70-3 (benzo(a)pyren), CAS 53-70-3 (dibenz(ah)anthracene) (minimum 5 of the parameters quantitative) A PAH concentration in the samples of approximately 0,1-10 mg/kg per PAH is to be expected.	Aug-24	
2010430	Textiles - lead release (saliva simulant, EN 16711-3)	lead	May-24	
2011013	Textiles - extractable dyestuffs (ISO 16373-2)	Detection of at least 3 extractable dyestuffs	Jun-24	
2011017	Textiles - chlorobenzenes and chlorotoluenes (EN 17137)	At least 4 different substances quantitatively	May-24	
2010177	Textiles - pesticides	This is a multi-residue proficiency testing. For the proficiency testing schemes on pesticides/ pesticide residues, a pre- selection of pesticides has been made according to relevance: viewable in the list of analytes published by the DRRR in Annex 1. From this list, a selection of pesticides will be available for identification and quantification in the proficiency testing.	Sep-24	
2011144	textiles - rPET share	quantitative determination of the proportion of recycled PET (%)	Jul-24	

Proficiency Testing for mechanical textile testing can be found in the catalogue "material testing" or the online catalogue: e. g. fabric properties, functional properties, colour fastness, determination of fibre blends, laminated fabrics, personal protective equipment (PPE)

[A] = For accredited and non-accredited status please see Online portal (ODIN)

tattoo ink

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Art. No.	proficiency testing type ^[A]	requested parameters	period	To view pricing information visit our online Portal:
2010338	Tattoo ink - preservatives	benzisothiazolinone (BIT)	Dec-24	Login or register
2010340	Tattoo ink - aromatic amines	aniline, o-Anisidine, o-toluidine, 5-nitro-o- toluidine	Dec-24	
2010560	Tattoo ink - elements	tin, zinc, nickel, strontium, antimony, barium, cadmium, cobalt, lead (minimum 4 of the parameters quantitative)	Apr-24	

jewellery

Art. No.	proficiency testing type ^[A]	requested parameters	period	
2010568	jewellery (acc. to EN 1811)	testing for nickel release	Jul-24	
2010969	Lead and cadmium in jewelry	Lead, cadmium	Oct-24	

[A] = For accredited and non-accredited status please see Online portal (ODIN)

Art. No.	proficiency testing type ^[A]	requested parameters	period	To view pricing information visit our online Portal:
2010206	care products	methylparaben, ethylparaben, propylparaben, n-butylparaben, phenoxyethanol, benzoic acid, sorbic acid, methylisothiazolinone, isobutylparaben	Oct-24	Login or register
3010015	shampoo, lotion	fat, density, pH-value, dry residue, water content, urea	Aug-24	
2010201	cream, lotion	dexpanthenol, tocopherolacetat, retinolpalmitate	Sep-24	
3010017	Determination of the total fluoride content in dental care	fluoride	Oct-24	
2010332	Cosmetics - metals	aluminium, copper, zinc	Apr-24	
2010700	Cosmetics - heavy metals (ISO 21392)	lead, arsenic, antimony, nickel, cobalt, total chromium, cadmium	Oct-24	
2010334	Cosmetics - UV filters	EHS, BMDM, EHT, PBSA, OC, titanium dioxide	May-24	
2010336	Cosmetics - PAHs	naphthalene, anthracene, benzo(a)anthracene, chrysene, benzo(b)fluoranthen, benzo(k)fluoranthen, benzo(j)fluoranthen, benzo(e)pyren, benzo(a)pyren, dibenz(ah)anthracene (minimum 3 of the parameters quantitative) A PAH concentration in the samples of approximately 0,5-50 mg/kg per PAH is to be expected.	Jul-24	
2010556	tensides in cosmetics	Sodium Laureth Sulfate, Cocamidopropyl	Feb-24	
2010000		betaine (CAPB), Coco-glucoside	Feb-25	
2010558	Cosmetics - mineral oil	MOSH C10 - C50, MOAH C10 - C50	Mar-24	
			Mar-25	
2010650	Cosmetics - ant-dandruff	pirocton-olamine, zinc pyrithione	Mar-24	
2010000	products		Mar-25	

cosmetics

[A] = For accredited and non-accredited status please see Online portal (ODIN)

Art. No.	proficiency testing type ^[A]	requested parameters	period	To view pricing information visit our online Portal:
2010652	Cosmetics - solvents	ethanol, isopropyl alcohol, acetone, propylene glycol	Aug-24	Login or register
2010329	perfume, body spray	flash point	Aug-24	
2010397	Self-tanner	dihydroxyacetone, formaldehyde	Apr-24	
2010399	Sunscreen - UVA photoprotection (in vitro, ISO 24443)	UVA photoprotection	Apr-24	
2011022	Cosmetics - rheology (ISO 3219)	viscosity	Jun-24	
2011100	Cosmetics - 3-lodoprop-2-yn- 1-yl butylcarbamate (IPBC)	3-lodoprop-2-yn-1-yl butylcarbamate (IPBC)	Sep-24	
2011129	Cosmetics - AOX	ΑΟΧ	Oct-24	
2011141	Cosmetic products – pesticides	This is a multi-residue proficiency testing. For the proficiency testing schemes on pesticides/ pesticide residues, a pre- selection of pesticides has been made according to relevance: viewable in the list of analytes published by the DRRR in Annex 1. From this list, a selection of pesticides will be available for identification and quantification in the proficiency testing.	Nov-24	
2011158	Cosmetic products - Fragrances	Qualitative and quantitative detection of fragrances	Oct-24	

cosmetics

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[A] = For accredited and non-accredited status please see Online portal (ODIN)

Art. No.	proficiency testing type ^[A]	requested parameters	period
2010314	migration of printing ink constituents quant. determination of monomers and initiators -round 1-	CAS 94108-97-1: Di(tri-methylolpropan)tetraacrylat (Di- TMPTA), CAS 57472-68-1: Dipropylene glycol diacrylate (DPGDA), CAS 119313-12-1: 1-Butanone,2-(dimethylamino)-1-(4-(4- morpholinyl)phenyl)-2-(phenylmethyl)- CAS 84434-11-7: 2,4,6-trimethylbenzoylphenyl phosphinate food simulating matrices: 50% ethanol, 95% ethanol	Jul-24
2010316	migration of printing ink constituents quant. determination of monomers and initiators	CAS 42978-66-5: Tri(propylene glycol)diacrylate (TPGDA), CAS 15625-89-5: Tri(methylolpropan)triacrylate (TMPTA), CAS 272460-97-6: 1-Propanone,1-[4-[(4- benzoylphenyl)thio]phenyl]-2-methyl-2-[(4- methylphenyl)sulfonyl]-,	Nov-24

printing inks

[A] = For accredited and non-accredited status please see Online portal (ODIN)

2010314	determination of monomers and initiators -round 1-	1-Butanone,2-(dimethylamino)-1-(4-(4- morpholinyl)phenyl)-2-(phenylmethyl)- CAS 84434-11-7: 2,4,6-trimethylbenzoylphenyl phosphinate food simulating matrices: 50% ethanol, 95% ethanol	Jul-24	Login or register
2010316	migration of printing ink constituents quant. determination of monomers and initiators -round 2-	CAS 42978-66-5: Tri(propylene glycol)diacrylate (TPGDA), CAS 15625-89-5: Tri(methylolpropan)triacrylate (TMPTA), CAS 272460-97-6: 1-Propanone,1-[4-[(4- benzoylphenyl)thio]phenyl]-2-methyl-2-[(4- methylphenyl)sulfonyl]-, CAS 162881-26-7: Bis(2,4,6-trimethylbenzoyl)- phenylphosphineoxide	Nov-24	
2010193	printing ink constituents in synthetic samples - monomers -round 3-	CAS 94108-97-1: Di(tri-methylolpropan)tetraacrylat (Di- TMPTA), CAS 57472-68-1: Dipropylene glycol diacrylate (DPGDA), CAS 42978-66-5: Tri(propylene glycol)diacrylate (TPGDA), CAS 15625-89-5: Tri(methylolpropan)triacrylate (TMPTA)	Sep-24	
3010019	printing ink constituents in synthetic samples - initiators -round 4-	CAS 119344-86-4: 2-dimethylamino-2-(4- methyl-benzyl)-1-(4-morpholin-4-yl-phenyl)- butan-1-one CAS 84434-11-7: 2,4,6-trimethylbenzoylphenyl phosphinate CAS 272460-97-6: 1-Propanone,1-[4-[(4- benzoylphenyl)thio]phenyl]-2-methyl-2-[(4- methylphenyl)sulfonyl]-, CAS 162881-26-7: Bis(2,4,6-trimethylbenzoyl)- phenylphosphineoxide	Nov-24	

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To view pricing information

visit our online Portal:

chemical-physical proficiency testing

For your registration we recommend to use our online catalogue (ODIN) or the registration forms on our homepage (<u>www.DRRR.de</u>). You can also use the registration forms on page 32 of this catalogue.

toys

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Art. No.	proficiency testing type ^[A]	requested parameters	period	To view pricing information visit our online Portal:
2010562	Scraped-off materials - Elements Part 1 (EN 71-3)	zinc, nickel, strontium, barium, cadmium, lead	May-24	Login or register
2010564	Toys - colourfastness (DIN 53160)	artificial saliva, artificial sweat	Jun-24	
2010626	Liquid toys - preservatives (EN 71-10, EN 71-11)	methylisothiazolinone (MI), benzisothiazolinone (BIT)	Apr-24	
2010253	Finger paint - NDELA (EN 71- 12)	N-Nitrosodiethanolamine (NDELA)	Apr-24	
2010255	Toys - Dyes (EN 71-11)	Dyes according to table 2 B of EN 71-9	Jul-24	
2010257	Toys - Aqueous migrat (EN 71-11)	bisphenol A, phenol, acrylamide	Aug-24	
2010299	wobble mass, slime - boron (EN 71-3)	boron	Sep-24	
2010301	Formaldehyde release (EN 717-3) (use of a model matrix)	formaldehyde (flask method)	Oct-24	
2010309	Finger paint - primary aromatic amines (EN 71-7))	CAS 101-77-9 (4,4'-Methylenedianiline), CAS 95-53-4 (o-Toluidine), CAS 90-04-0 (2- Methoxyaniline), CAS 106-47-8 (4- Chloraniline), CAS 91-59-8 (2- Napthylamine), CAS 92-87-5 (Benzidine), CAS 62-53-3 (Aniline), CAS 119-93-7 (3,3'- Dimethylbenzidine), CAS 91-94-1 (3,3'- Dichlorbenzidine) and CAS 119-90-4 (3,3'- Dimethoxybenzidine). The samples contain at least 5 aromatic amines.	Dec-24	

[A] = For accredited and non-accredited status please see Online portal (ODIN)

chemical-physical proficiency testing

For your registration we recommend to use our online catalogue (ODIN) or the registration forms on our homepage (<u>www.DRRR.de</u>). You can also use the registration forms on page 32 of this catalogue.

toys

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Art. No.	proficiency testing type ^[A]	requested parameters	period	To view pricing information visit our online Portal:
2010440	Finger paint - Preservatives (EN 71-7)	sorbic acid, benzoic acid, 2- phenoxyethanol, PHB ester	Aug-24	Login or register
2011009	Toys - lead, cadmium (CPSC CH-E1004-11, CPSC-CH- E1002-08.3)	Lead, cadmium	Jul-24	
2011154	toys - migration of plasticizers (EN 71-9)	CAS 115-86-6 (Triphenylphosphate) , CAS 73-30-8 (Tri-o-tolyl-phosphate), CAS 536-04- 2 (Tri-m-tolyl-phosphate), CAS 78-32-0 (Tri- p-tolyl-phosphate)	Sep-24	
2011155	toys - wood preservative (EN 71-10, EN 71-11)	Pentachlorophenol and its salts, lindane, cyfluthrin, cypermethrin, deltamethrin, permethrin	Jun-24	
2011156	Scraped-off materials - Elements Part 2 (EN 71-3)	tin, antimony, cobalt, chromium III, chromium VI, total chromium	Dec-24	
2011157	toys - organotin, scrapped-off materials (EN 71-3)	Organotin - organotin compounds: butyltin, dibutyltin, tributyltin	Sep-24	

[A] = For accredited and non-accredited status please see Online portal (ODIN)

Art. No.	proficiency testing type ^[A]	requested parameters	period	To view pricing information visit our online Portal:
2010914	organic acids	citric acid, formic acid, amidosulfonic acid	Oct-24	Login or register
2010916	oxidizing agent	sodium hypochlorite, hydrogen peroxide, percarbonate	Oct-24	
2010918	reducing agent	sodium dithionite, sulphurous acid, oxalic acid	Oct-24	
2010920	acid / alkali cleaning agent	pH value, acid reserve, alkali reserve	Apr-24	
2010922	alcohol-based cleaner	ethanol	Apr-24	
2010432	hygienic rinsing agent - disinfectant	DDAC (didecyldimethylammonium chloride), BAC (benzalkonium chloride)	Jul-24	
2010436	denaturant	Bitrex (denatonium benzoate)	Jul-24	
2010438	disinfectant	formaldehyde, glutaraldehyde, triclosan	Jul-24	

cleaning agent

metals

Art. No.	proficiency testing type ^[A]	requested parameters	period	
2010171	Metal - elemental determination by XRF	determination of various elements, e.g. nickel, copper, zinc, lead	Jul-24	
2010416	Refractory products - elemental determination by XRF (ISO 12677)	Determination of various elements, e.g. nickel, copper, zinc, lead	Jul-24	

Proficiency Testing for coating thickness in metal can be found in the catalogue "material testing" or the online catalogue.

Art. No.	proficiency testing type ^[A]	requested parameters	period	
2010264	liquids from e-cigarettes (ISO 20714)	glycerin, propylene glycol, nicotine	Sep-24	
2010420	liquid from CBD cigarettes	CAS 13956-29-1 Cannabidiol (CBD), CAS 586-62-9 Terpinolene, CAS 5989-27-5 D- Limonene, CAS 87-44-5 β-Caryophyllene, CAS 13877-91-3 Ocimene, CAS 123-35-3 Myrcene, CAS 80-56-8 α-Pinene, CAS 127- 91-3 β-Pinene	Sep-24	

e-cigarettes

leather

Art. No.	proficiency testing type ^[A]	requested parameters	period	To view pricing information visit our online Portal:
2010186	Leather - Identification with microscopy (ISO 17131)	identification of leather (imitation leather and leather of various animal species)	May-24	Login or register
2010189	Leather – total metal content (ISO 17072-2)	chromium, lead, cadmium, nickel, aluminium, titanium, zirconium, iron	May-24	
2010233	Leather – water soluble matter (ISO 4098)	water-soluble substances, water-soluble inorganic substances	May-24	
2010192	Leather - volatile matter (ISO 4684)	Mass of volatile substances	Jun-24	
2010194	Leather – preservative content (ISO 13365-1)	CAS 21564-17-0 (TCMTB), CAS 59-50-7 (CMK), CAS 90-43-7 (OPP), CAS 26530-20-1 (OIT)	Jun-24	
2010196	Leather – formaldehyde content (ISO 17226-1)	CAS 50-00-0 (formaldehyde)	Oct-24	
2010198	Leather - Aromatic amines from azo dyes (ISO 17234-1)	Quantitative detection of azo dyes over aromatic amines according to ISO 17234-1 (at least 3)	Jul-24	
2010200	Leather - 4- aminoazobenzene (ISO 17234-2)	CAS 60-09-3 (4-aminoazobenzene) according to ISO 17234-2	Jul-24	
2010202	Leather – chlorophenols (ISO 17070)	Tetrachlorphenol-, Trichlorphenol-, Dichlorphenol-, Monochlorphenol- Isomeren und CAS 87-86-5 (Pentachlorphenol)	Nov-24	
2010265	Leather - Determination of organotin compounds	CAS 1118-46-3 (monobutyltin trichloride), CAS 3091-25-6 (trichlorooctylstannane), CAS 683-18-1 (dibutyltin dichloride), CAS 3542-36-7 (dioctyltin dichloride), CAS 1461- 22-9 (tributyltin chloride), CAS 639-58-7 (triphenyltin chloride), CAS 3091-32-5 (tricyclohexyltin chloride), CAS 1461-25-2 (tetra-n-butyltin)	Aug-24	
2010211	Leather – Alkylphenols, ethoxylates (ISO 18218-1,-2)	CAS 68412-54-5 (nonylphenol ethoxylate), CAS 9002-93-1 (octylphenol ethoxylate), CAS 84852–15–3 4-(nonylphenol isomer mixture), CAS 140–66–9 (4-tert- octylphenol)	Aug-24	
2010305	Leather – Determination of naphthalene	CAS 91-20-3 (naphthalene)	Jun-24	
2010418	Leather – extractable metals (ISO 17072-1)	antimony, arsenic, lead, cadmium, chromium, cobalt, copper, nickel	Dec-24	

Proficiency Testing for mechanical leather testing can be found in the catalogue "material testing" or the online catalogue.

[A] = For accredited and non-accredited status please see Online portal (ODIN)

leather

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Art. No.	proficiency testing type ^[A]	requested parameters	period	To view pricing information visit our online Portal:
2011005	Footwear materials - Dimethyl fumarate (DMFU) (ISO 16186)	Dimethyl fumarate (DMFU)	Aug-24	Login or register
2011007	Footwear materials - Dimethylformamide (DMF) (ISO 16189)	Dimethylformamide (DMF)	Aug-24	
2011122	Leather - pesticide residues content (ISO 22517)	This is a multi-residue proficiency testing. For the proficiency testing schemes on pesticides/ pesticide residues, a pre- selection of pesticides has been made according to relevance: viewable in the list of analytes published by the DRRR in Annex 1. From this list, a selection of pesticides will be available for identification and quantification in the proficiency testing.	Oct-24	
2011143	Leather - Perfluorinated compounds (ISO 23702-1)	CAS 1763-23-1 (perfluorooctanesulfonic acid), CAS 335-67-1 (perfluorooctanoic acid), CAS 375-95-1 (perfluorononanoic acid), CAS 355-46-4 (perfluorohexanesulfonic acid)	Sep-24	
2011145	Leather - Bisphenols (ISO 11936)	Bisphenol A, Bisphenol B, Bisphenol F, Bisphenol S	Apr-24	
2011146	Footwear materials - PAHs (ISO 16190)	CAS 91-20-3 (naphthalene), CAS 120-12-7 (anthracene), CAS 56-55-3 (benzo(a)anthracene), CAS 218-01-9 (chrysene), CAS 205-99-2 (benzo(b)fluoranthene), CAS 207-08-9 (benzo(k)fluoranthene), CAS 205-82-3 (benzo(i)fluoranthene), CAS 192-97-2 (benzo(e)pyrene), CAS 50-70-3 (benzo(a)pyrene), CAS 53-70-3 (dibenz(ah)anthracene) (at least 5 of the parameters quantitative)	Oct-24	

Proficiency Testing for mechanical leather testing can be found in the catalogue "material testing" or the online catalogue.

[A] = For accredited and non-accredited status please see Online portal (ODIN)

kitchen utensils and dishes

Art. No.	proficiency testing type ^[A]	requested parameters	period	To view pricing information visit our online Portal:
2010407	release of metals from enamel (ISO 4531)	Cadmium, cobalt, nickel, lead, lithium, aluminium, manganese - release in the simulant 3% acetic acid	Oct-24	Login or register
2010411	Ceramics - specific migration: lead, cadmium (EN 1388-1)	Lead and cadmium in the simulant acetic acid (40 ml/l)	Oct-24	
2010414	Ceramics - specific migration: cobalt	Cobalt in the simulants 4% acetic acid, 0,5% citric acid and 10% acetic acid	Oct-24	

adhesive

Art. No.	proficiency testing type ^[A]	requested parameters	period	
2010422	Adhesive - preservatives	Methylisothiazolinone (MIT), Chloromethylisothiazolinone (CIT), Benzisothiazolinone (BIT), Octylisothiazolinone (OIT), Phenoxyethanol	Jun. 24	
2010424	Adhesive - formaldehyde (ISO 11402)	Formaldehyde	Jun. 24	
2010426	Adhesive - VOC	VOC in the value range 0,01-0,1% (100-1000 mg/kg), e.g. 1-Butanol, Acetone, Benzene, Toluene, Styrene	Okt. 24	
2010428	Adhesive - solvents	e.g. ethanol, acetone, benzene, toluene, methyl acetate (The test should be carried out according to EN ISO 11890-2 or a comparable method. Solvent quantities of more than 0,01% by mass are to be expected.)	Jun. 24	
2010925	Adhesive - Migration of primary aromatic amines	CAS 823-40-5 (2,6-Diamino-toluol), CAS 95- 80-7 (2,4-Diamino-toluol), CAS 101-77-9 (4,4-Diamino-diphenylmethan), CAS 1208- 52-2 (2,4-Diamino-diphenylmethan), CAS 6582-52-1 (2,2-Diamino-diphenylmethan) in the simulant 3% acetic acid	Jun. 24	

[A] = For accredited and non-accredited status please see Online portal (ODIN)

rubber

Art. No.	proficiency testing type ^[A]	requested parameters	period	To view pricing information visit our online Portal:
2010853	Rubber - PAH content	CAS 91-20-3 (naphthalene), CAS 120-12-7 (anthracene), CAS 56-55-3 (benzo(a)anthracene), CAS 218-01-9 (chrysene), CAS 205-99-2 (benzo(b)fluoranthene), CAS 207-08-9 (benzo(k)fluoranthene), CAS 205-82-3 (benzo(j)fluoranthene), CAS 192-97-2 (benzo(e)pyrene), CAS 50-70-3 (benzo(a)pyrene), CAS 53-70-3 (dibenz(ah)anthracene) (at least 5 of the parameters quantitative)	Sep-24	<u>Login or register</u>
2011130	Rubber - overall migration (one-sided contact)	food simulating matrix: ethanol 10%, 20%, 50%, acetic acid 3%, vegetable oil	Jan-24	
2011131	Rubber - overall migration (total immersion)	food simulating matrix: ethanol 10%, 20%, 50%, acetic acid 3%, vegetable oil	Oct-24	
2011132	Rubber - overall migration (substitute test, one-sided contact)	food simulating matrix: ethanol 95%, ISO- octane	Dec-24	
2011133	Rubber - Specific migration: metals	specific migration of zinc, aluminium, lead in simulant acetic acid 3% and distilled water	Nov-24	
2011134	Rubber - Specific migration: antioxidant	CAS 68610-51-5 Poly(dicyclopentadiene-co-p-cresol) in simulant ethanol 95% and ISO octane	Jan-24	

[A] = For accredited and non-accredited status please see Online portal (ODIN)

organoleptic proficiency testing

For your registration we recommend to use our online catalogue (ODIN) or the registration forms on our homepage (<u>www.DRRR.de</u>). You can also use the registration forms on page 32 of this catalogue.

films

Art. No.	proficiency testing type ^[A]	requested parameters peri		To view pricing information visit our online Portal:
For the following proficiency testing schemes you can not enter your results online:		Login or register		
3010011	sensory testing of food contact materials and articles (FCM) (DIN 10955)	examination for panels - minimum number of participants: 6 assessors! organoleptic analysis - sample preparation, intensity estimation, descriptive testing	Sep-24	

paper / board

Art. No.	proficiency testing type ^[A]	requested parameters	period	
For the follo	For the following proficiency testing schemes you can not enter your results online:			
3010024	sensory of board and paper acc. to EN 1230	examination for panels - minimum number of participants: 6 assessors! organoleptic analysis - sample preparation, intensity estimation, descriptive testing	Sep-24	
3010022	threshold value examination off flavour	organoleptic analysis - threshold value examination for packaging off-flavour	Aug-24	

[A] = For accredited and non-accredited status please see Online portal (ODIN)

registration form proficiency testing

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

Article No. / proficiency testing type	period	result release and report online (ODIN)	result release by e- mail / fax; report by e- mail	additional sample sets / assessor (organoleptic)

Up to nine additional result sheets can be returned for chemical-physical, microbiological and physical-mechanical proficiency testing rounds are free of charge. As a participant, you benefit from our international recognized proficiency testing schemes. By submitting up to ten result sheets you are now enabled to run international comparisions to check different methods and different lab technicians with one proficiency testing round. Your benefit: Participating in DRRRproficiency testing services save costs for your quality assurance! If you need additional sample sets, you have the opportunity to order it according to our latest product catalogue.

Please note, that the free of charge service is only valid for returning result sheets by ODIN. If you send us your results by mail, fax or postal delivery, the additional result sheet will be charged according the latest product catalogue as a sample set equivalent.

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.

conditions.

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Importance

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

Benefit of using certified reference materials

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.

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.

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. Description reference material

Profit with our high quality standards for your lab work

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

Availability and order request of reference material

Please use the order from on page 50.

films

Art. No.	material description	parameter *	additional information	packaging unit	prices
1151001	overall migration of plastic film (one-sided contact)	ethanol 10 %, ethanol 20 %, ethanol 50 %, acetic acid 3 %, distilled water, vegetable oil	-	1 film á app. 40 x 60 cm	100€
1151002	overall migration of plastic film (total immersion)	ethanol 10 %, ethanol 20 %, ethanol 50 %, acetic acid 3 %, distilled water, vegetable oil	-	1 film á app. 40 x 60 cm	100€
1151044	overall migration of plastic film (article filling)	ethanol 10 %, ethanol 20 %, ethanol 50 %, acetic acid 3 %	-	310 ml	100€
1151045	overall migration of plastic film(fatty foodstuffs) ("substitute tests")	ISO-octane, ethanol 95 %	-	1 film á app. 40 x 60 cm	100€
1151046	overall migration of plastic film at high temperatures	olive oil	-	on request	100€
1151056	overall migration from plastic using MPPO as a simulant	overall migration by using Tenax (MPPO) as a simulant	-	app. 20 x 30 cm	100€
1151116	overall migration (pouch)	ethanol 10%, 20%, 50%, acetic acid 3% and vegetable oil	-	on request	100€
1151167	overall migration (fatty test food) (substitute test, one- sided contact)	Food simulants: ISO octane, 95% ethanol	-	on request	100€
1151003	specific migration of plastic film: caprolactam	ethanol 10 %, ethanol 20 %, ethanol 50 %, acetic acid 3 %, distilled water, vegetable oil	-	1 film á app. 40 x 30 cm	100€
1151004	specific migration of plastic film: therephthalic acid	ethanol 10 %, ethanol 50 %, acetic acid 3 %, distilled water, vegetable oil	-	app. 34 x 15	100€
1151005	specific migration of plastic film: acrylonitrile	ethanol 10 %, acetic acid 3 %, distilled water, olive oil	-	app. 103 g granulate	100€
1151054	specific migration of plastic film: 1-Octen	ethanol 50 %, ethanol 95 %, vegetable oil	-	app. 90 g granulate	100€
1151058	specific migration of plastic film: melamine	ethanol 10%, acetic acid 3%, distilled water, vegetable oil	-	4 x 5 g granules	100€
1151059	specific migration of plastic film: vinyl acetate	ethanol 10%, acetic acid 3%, distilled water, olive oil	-	103 g	100€
1151105	specific migration (acrylonitrile trimers)	acrylonitrile trimers	-	on request	100€
1151130	specific migration (primary aromatic amines) 1	CAS 95-53-4 (o-toluidine), CAS 92-87- 5 (benzidine), CAS 62-53-3 (aniline) and CAS 91-94-1 (3,3'- dichlorobenzidine) in simulant distilled water, 3% acetic acid, CAS 101-77-9 (4,4'-Methylenedianiline)	-	on request	100€
1151131	specific migration (primary aromatic amines) 2	CAS 90-04-0 (2-methoxyaniline), CAS 106-47-8 (4-chloroaniline), CAS 91-59- 8 (2-napthylamine) and CAS 119-93-7 (3,3'-dimethylbenzidine) in simulant 10% ethanol and 15% ethanol	-	on request	100€

* in individual cases it can happen that there is no reference value available for a listed parameter

Please use the order from on page 50.

films

Art. No.	material description	parameter *	additional information	packaging unit	prices
1151158	specific migration metals part 1	specific migration of antimony, arsenic, cadmium in simulant acetic acid 3%, water	-	on request	100€
1151159	specific migration metals part 2	specific migration of total chromium, lead, iron in simulant acetic acid 3%, water	-	on request	100€
1151006	identification of polymer material (mono-layer plastic film)	qualitative identification (e.g. PE, PP, …)	-	set consists of 3 foils á app.10 x 10	100€
1151007	identification of plastic granules	qualitative identification	-	30 ml	100€
1151008	identification of polymer material (multi-layer plastic film)	qualitative identification of single polymer layers in a multi-layer plastic foil (e.g. PE, PP, …)	-	set consists of 3 foils á app.20 x 30 cm	100 €
1151079	identification of different PA types	e.g. PA6, PA6.6, PA11, PA12	-	app. 15 g	100€
1151163	Identification of microplastic	qualitative determination of microplastics in water	-	on request	100€
1151164	Elemental determination of plastics by X-ray fluorescence analysis (XRF)	arsenic, total bromine, cadmium, total chromium, mercury, lead, sulfur, antimony, tin, zinc	-	on request	100€
1151077	testing of: ethylene glycol in food simulant	ethanol 10%; 20%; 50%, acetic acid 3%, distilled water, vegetable oil	-	100 ml	100€
1151078	testing of: di-ethylene glycol in food simulant	ethanol 10%; 20%; 50%, acetic acid 3%, distilled water, vegetable oil	-	100 ml	100€
1151048	testing of: Bisphenol A in food simulant	distilled water, acetic acid 3 %, ethanol 10 %	-	100 ml	100€
1151049	testing of: formaldehyde in food simulant	distilled water, acetic acid 3 %, ethanol 10 %, vegetable oil	-	100 ml	100€
1151060	testing of: acrylamide	ethanol 10%, acetic acid 3%, distilled water, olive oil	-	100 g	100€
1151047	determination of overall migration potential by rapid extraction	ISO-octane, ethanol 95 %	-	on request	100€
1151009	determination of overall migrat on synthetic samples	ethanol 10 %, ethanol 20 %, ethanol 50 %, acetic acid 3 %, distilled water	-	app. 20 x 30 cm	100€
1151050	determination of the phthalate content in consumer goods	DBP, BBP, DEHP, DNOP, DINP, DIDP, DEP, DMP	-	3 g	339€

* in individual cases it can happen that there is no reference value available for a listed parameter

Please use the order from on page 50.

films

Art. No.	material description	parameter *	additional information	packaging unit	prices
1151051	determination of vinylchloride monomer in synthetic sample	vinyl chloride monomer	-	on request	100€
1151061	acetaldehyde in mineral water	acetaldehyde	-	75 ml	100€
1151062	determination of bisphenol A content in plastics	bisphenol A monomer	-	5 g	100€
1151063	determination of 1,3 butadiene content in plastics	1,3 butadiene monomer	-	4 g	100€
1151114	styrol oligomers in synthetic samples	CAS 1001-75-0 (1,3-Diphenylpropane), CAS 16606-47-6 (2,4-Diphenyl-1- butene), CAS 20071-09-4 (trans-1,2- Diphenylcyclobutane), CAS 18964-53- 9 (2,4,6-Triphenyl-1-hexene) and CAS 26681-79-8 (1-Phenyl-4-(1- phenylethyl)-1,2,3,4- tetrahydronaphthalene)	-	on request	100€
1151132	determination of the PAH content in plastics	CAS 91-20-3 (naphthalene), CAS 120- 12-7 (anthracene), CAS 56-55-3 (benzo(a)anthracene), CAS 218-01-9 (chrysene), CAS 205-99-2 (benzo(b)fluoranthene), CAS 207-08-9 (benzo(k)fluoranthene), CAS 205-82-3 (benzo(j)fluoranthene), CAS 192-97-2 (benzo(e)pyrene), CAS 50-70-3 (benzo(a)pyrene), CAS 53-70-3 (dibenz(ah)anthracene) (at least 5 of the parameters quantitative)	-	on request	100€
1151173	Volatile fractions in silicone	gravimetric determination of the volatile fractions	-	on request	100 €

* in individual cases it can happen that there is no reference value available for a listed parameter

Please use the order from on page 50.

paper / board

Art. No.	material description	parameter *	additional information	packaging unit	prices
1151015	mineral oil in cardboard	MOSH C10-C16, MOSH C16-C20, MOSH C20-C25, MOSH C25-C35, MOAH C10-C16, MOAH C16-C25, MOAH C25-C35	-	1 cardboard á app. 30 x 20 cm	100 €
1151016	mineral oil in low-fat and starch-rich foodstuff	MOSH C10-C16, MOSH C16-C20, MOSH C20-C25, MOSH C25-C35, MOSH C35-C40, MOSH C40-C50, MOAH C10-C16, MOAH C16-C25, MOAH C25-C35, MOAH C35-C50	-	50 g	100€
1151053	mineral oil in cocoa butter and chocolate	MOSH C10-C16, MOSH C16-C20, MOSH C20-C25, MOSH C25-C35, MOSH C35-C40, MOSH C40-C50, MOAH C10-C16, MOAH C16-C25, MOAH C25-C35, MOAH C35-C50	-	100 g	100€
1151104	mineral oil in cheese and milk powder	MOSH C10-C16, MOSH C16-C20, MOSH C20-C25, MOSH C25-C35, MOSH C35-C40, MOSH C40-C50, MOAH C10-C16, MOAH C16-C25, MOAH C25-C35, MOAH C35-C50	-	on request	100€
1151017	mineral oil in edible fat and edible oil	MOSH C10-C16, MOSH C16-C20, MOSH C20-C25, MOSH C25-C35, MOSH C35-C40, MOSH C40-C50, MOAH C10-C16, MOAH C16-C25, MOAH C25-C35, MOAH C35-C50	-	15 g	100€
1151052	migration of mineral oil from cardboard	Migration of mineral oil in food simulating matrix: Tenax	-	1 cardboard á app. 30 x 20	100€
1151161	Mineral oil in jute bags	MOSH C10-C16, MOSH C16-C20, MOSH C20-C25, MOSH C25-C35, MOSH C35-C40, MOSH C40-C50, MOAH C10-C16, MOAH C16-C25, MOAH C25-C35, MOAH C35-C50	-	on request	100€
1151055	migration from paper and board using MPPO as a simulant	overall migration by using Tenax (MPPO) as a simulant	-	1 cardboard á app. 30 x 20 cm	100€
1151064	pH value in aqueous extract (cold and hot)	pH value	-	on request	100€
1151066	determination of glyoxal content	glyoxal	-	ca. 10 g	100€
1151067	colour fastness of dyed paper and board	distilled water, acetic acid 3%, olive oil, alkali salt solution	-	1 cardboard á app. 30 x 20	100€
1151068	colour fastness of fluorescent whitened paper and board	distilled water, acetic acid 3%, olive oil, alkali salt solution	-	1 cardboard á app. 30 x 20	100€
1151149	overall migration of paper and cardboard	overall migration in simulant ethanol 95%	-	on request	100€
1151150	testing of benzophenone in food simulating matrix	specific migration of benzophenone in simulant ethanol 95%	-	on request	100€

* in individual cases it can happen that there is no reference value available for a listed parameter

Please use the order from on page 50.

paper / board

Art. No.	material description	parameter *	additional information	packaging unit	prices
1151151	gravimetric determination of constituents of paper - cardboard	dry content, residue on ignition, ash	-	on request	100€
1151152	determination of the DIPN content in paper - cardboard (EN 14719)	DIPN (Diisopropylnaphthalin)	-	on request	100€
1151153	determination of 1,3- dichloro-2-propanol and 3- monochloro-1,2-propanediol	1,3-dichloro-2-propanol, 3- monochloro-1,2-propanediol in water extract	-	on request	100€
1151154	PCB in paper - cardboard	PCB 52, PCB 101, PCB 138	-	on request	100€
1151155	cadmium and lead in aqueous extract (EN 12498)	cadmium, lead	-	on request	100€
1151156	determination of acid soluble manganese (ISO 1830)	manganese	-	on request	100€
1151157	bisphenol S in thermal paper	Bisphenol S	-	on request	100€
1151171	Determination of total chlorine and organically bound chlorine (ISO 11480)	total chlorine, organically bound chlorine	-	on request	100€

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Please use the order from on page 50.

textiles

Art. No.	material description	parameter *	additional information	packaging unit	prices
1151018	extractable heavy metals in textiles	cadmium, lead, nickel, mercury, chromium (quantitative)	-	4 g	100 €
1151020	flame retardants in textiles	tributyl phosphate (CAS No 126-73-8), o-triskresyl phosphate (CAS No 78- 30-8), tris(2-chloroethyl)-phosphate (CAS No 115-96-8), tris(2-chloro-1- methylethyl)-phosphate (CAS No 13674-84-5)	-	1 g	100€
1151021	azo dyes in textiles	qualitative determination of aromatic amines derived from azo dyes acc. EN 14362-1	-	2 g	100€
1151082	aniline in textiles	CAS 62-53-3 (aniline)	-	on request	100 €
1151083	2,4-xylidine and 2,6-xylidine in textiles	CAS 95-68-1 (2,4-xylidine), CAS 87-62- 7 (2,6-xylidine)	-	on request	100€
1151084	alkylphenols and alkylphenol ethoxylates in textiles	CAS 68412-54-5 (nonylphenol ethoxylate), CAS 9002-93-1 (octylphenol ethoxylate), CAS 84852–15–3 4-(nonylphenol isomer	-	on request	100€
1151085	Textiles – Determination of chlorophenoles	Tetrachlorophenol-, trichlorophenol-, dichlorophenol-, monochlorophenol- isomers and CAS 87-86-5 (pentachlorophenol)	-	on request	100 €
1151086	organotin compounds in textiles	CAS 1118-46-3 (monobutyltin trichloride), CAS 3091-25-6 (trichlorooctylstannane), CAS 683-18- 1 (dibutyltin dichloride), CAS 3542-36- 7 (dioctyltin dichloride), CAS 1461-22- 9 (tributyltin chloride), CAS 639-58-7 (triphenyltin chloride), CAS 3091-32-5 (tricyclohexyltin chloride), CAS 1461- 25-2 (tetra-n-butyltin)	-	on request	100€
1151087	perfluorinated compounds in textiles	CAS 1763-23-1 (perfluorooctane sulfonic acid), CAS 335-67-1 (perfluorooctanoic acid), CAS 375-95- 1 (perfluorononanoic acid), CAS 355- 46-4 (perfluorohexane sulfonic acid)	-	on request	100€
1151088	pesticides in textiles	Chlorinated and phosphorus containing pesticides	-	on request	100€
1151089	determination of the total metal content in textiles	e.g. tin, cadmium and mercury	-	on request	100€
1151090	phthalates in textiles	CAS 28553-12-0 (DINP), CAS 117-81-7 (DEHP), CAS 117-84-0 (DNOP), CAS 26761-40-0 (DIDP), CAS 85-68-7 (BBP), CAS 84-74-2 (DBP), CAS 84-69- 5 (DIBP), CAS 131-18-0 (DPP), CAS 71888-89-6 (DIHP), CAS 117-82-8 (DMEP)	-	on request	100€

* in individual cases it can happen that there is no reference value available for a listed parameter

Please use the order from on page 50.

textiles

Art. No.	material description	parameter *	additional information	packaging unit	prices
1151091	PAH in textiles	CAS 91-20-3 (naphthalene), CAS 120- 12-7 (anthracene), CAS 56-55-3 (benzo(a)anthracene), CAS 218-01-9 (chrysene), CAS 205-99-2 (benzo(b)fluoranthen), CAS 207-08-9 (benzo(k)fluoranthen), CAS 205-82-3 (benzo(j)fluoranthen), CAS 50-70-3 (benzo(e)pyren), CAS 50-70-3 (benzo(a)pyren), CAS 53-70-3 (dibenz(ah)anthracene) (minimum 5 of the parameters quantitative)	A PAH concentration in the samples of approximately 0,1-10 mg/kg per PAH is to be expected.	on request	100€
1151143	determination of lead release with saliva simulant solution in textiles (EN 16711-3)	lead	-	on request	100€
1151172	extractable dyestuffs in textiles (ISO 16373-2)	Detection of at least 3 extractable dyestuffs	-	on request	100€
1151174	Chlorobenzenes and chlorotoluenes in textiles (EN 17137)	At least 4 different substances quantitatively	-	on request	100 €

* in individual cases it can happen that there is no reference value available for a listed parameter

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Please use the order from on page 50.

tattoo ink

Art. No.	material description	parameter *	additional information	packaging unit	prices
1151030	preservatives in tattoo ink	benzisothiazolinone (BIT)	-	app. 10 g	100€
1151031	aromatic amins in tattoo ink	aniline, o-Anisidine, o-toluidine, 5- nitro-o-toluidine	-	app. 10 g	100€
1151039	nickel in tattoo ink	tin, zinc, nickel, strontium, antimony, barium, cadmium, cobalt, lead (minimum 4 of the parameters quantitative)	-	2 g	100€

jewellery

Art. No.	material description	parameter *	additional information	packaging unit	prices
1151043	jewellery (acc. to EN 1811)	testing for nickel	-	1 metal 54x85x1 mm	100 €
1151166	Lead and cadmium in jewelry	Lead, cadmium	-	on request	100 €

* in individual cases it can happen that there is no reference value available for a listed parameter

Please use the order from on page 50.

cosmetics

Art. No.	material description	parameter *	additional information	packaging unit	prices
1151023	care products	methylparaben, ethylparaben, propylparaben, n-butylparaben, phenoxyethanol, benzoic acid, sorbic acid, methylisothiazolinone, isobutylparaben	-	50 g	100€
1151024	shampoo, lotion	fat, density, pH value, dry residue, water content, urea	-	300 ml	100€
1151025	cream, lotion	dexpanthenol, tocopherolacetat, retinolpalmitate	-	50 g	100€
1151026	Determination of the total fluoride content in dental care	fluoride	-	50 ml	100€
1151027	metals in cosmetics	aluminium, copper, zinc	-	15 ml	100€
1151071	heavy metals in cosmetics	lead, arsenic, antimony, nickel, cobalt, zinc, cadmium	-	50 ml	100€
1151028	quant. determination of UV filters	EHS, BMDM, EHT, PBSA, OC, titanium dioxide	-	25 g	100€
1151029	PAH in decorative cosmetics	naphthalene, anthracene, benzo(a)anthracene, chrysene, benzo(b)fluoranthen, benzo(k)fluoranthen, benzo(j)fluoranthen, benzo(e)pyren, benzo(a)pyren, dibenz(ah)anthracene	A PAH concentration in the samples of approximately 0,5-50 mg/kg per PAH is to be expected.	5 g	100€
1151037	tensides in cosmetics	Sodium Laureth Sulfate, Cocamidopropyl betaine (CAPB), Coco-glucoside	-	on request	100€
1151038	mineral oil hydrocarbons in care products	MOSH C10 - C50, MOAH C10 - C50	-	10 g	100€
1151069	Cosmetics - Determination of ant-dandruff products	pirocton-olamine, zinc pyrithione	-	5 g	100€
1151070	Determination of solvents in cosmetic products	ethanol, isopropyl alcohol, acetone, propylene glycol	-	50 ml	100€
1151117	perfume, body spray	flash point	-	on request	100€
1151128	self-tanner	dihydroxyacetone, formaldehyde	-	on request	100€
1151129	determination of sunscreen UVA photoprotection in vitro (ISO 24443)	UVA photoprotection	-	on request	100 €

* in individual cases it can happen that there is no reference value available for a listed parameter

Please use the order from on page 50.

printing inks

Art. No.	material description	parameter *	additional information	packaging unit	prices
1151010	migration of printing ink constituents quant. determination of monomers and initiators food simulating matrices: 50% ethanol, 95% ethanol type 1	CAS 94100-97-1: Di(tri- methylolpropan)tetraacrylat (Di- TMPTA), CAS 57472-68-1: Dipropylene glycol diacrylate (DPGDA), CAS 119313-12-1: 1-Butanone,2- (dimethylamino)-1-(4-(4- morpholinyl)phenyl)-2-(phenylmethyl)- CAS 84434-11-7: 2,4,6- trimethylbenzoylphenyl phosphinate	-	on request	113€
1151011	migration of printing ink constituents quant. determination of monomers and initiators food simulating matrices: 50% ethanol, 95% ethanol type 2	CAS 42978-66-5: Tri(propylene glycol)diacrylate (TPGDA), CAS 15625-89-5: Tri(methylolpropan)triacrylate (TMPTA), CAS 272460-97-6: 1-Propanone,1-[4- [(4-benzoylphenyl)thio]phenyl]-2- methyl-2-[(4-methylphenyl)sulfonyl]-, CAS 162881-26-7: Bis(2,4,6- trimethylbenzoyl)- phenylphosphineoxide	-	on request	113€
1151012	printing ink constituents in synthetic samples - monomers type 3	CAS 94100-97-1: Di(tri- methylolpropan)tetraacrylat (Di- TMPTA), CAS 57472-68-1: Dipropylene glycol diacrylate (DPGDA), CAS 42978-66-5: Tri(propylene glycol)diacrylate (TPGDA), CAS 15625-89-5: Tri(methylolpropan)triacrylate (TMPTA)	-	50 ml	113€
1151013	printing ink constituents in synthetic samples - initiators type 4	CAS 119344-86-4: 2-dimethylamino-2- (4-methyl-benzyl)-1-(4-morpholin-4-yl- phenyl)-butan-1-one CAS 84434-11-7: 2,4,6- trimethylbenzoylphenyl phosphinate CAS 272460-97-6: 1-Propanone,1-[4- [(4-benzoylphenyl)thio]phenyl]-2- methyl-2-[(4-methylphenyl)sulfonyl]-, CAS 162881-26-7: Bis(2,4,6- trimethylbenzoyl)- phenylphosphineoxide	-	10 g	113€

* in individual cases it can happen that there is no reference value available for a listed parameter

Please use the order from on page 50.

toys

Art. No.	material description	parameter *	additional information	packaging unit	prices
1151040	elements in toys; scrapped- off materials	tin, zinc, nickel, strontium, antimony, barium, cadmium, cobalt, lead	-	app. 5 g	100€
1151041	colourfastness of articles for common use type 1	Test with artificial saliva	-	app. 10 x 10 cm	100€
1151042	colourfastness of articles for common use type 2	Test with artificial saliva	-	app. 10 x 10 cm	100€
1151057	toys on water basis	methylisothiazolinone (MI), benzisothiazolinone (BIT)	-	app. 10 g	100€
1151106	finger color	N-Nitrosodiethanolamine (NDELA)	-	on request	100€
1151107	toy material extract: dyes	Dyes according to table 2 B of EN 71- 9	-	on request	100€
1151100	aqueous migrate: phenol	phenol	-	on request	100€
1151109	aqueous migrate: bisphenol A	bisphenol A	-	on request	100€
1151110	aqueous migrate: acrylamide	acrylamide	-	on request	100€
1151111	wobble mass, slime (EN 71- 3)	boron	-	on request	100€
1151115	primary aromatic amines in finger paint and colorants	CAS 101-77-9 (4,4'- Methylenedianiline), CAS 95-53-4 (o- Toluidine), CAS 90-04-0 (2- Methoxyaniline), CAS 106-47-8 (4- Chloraniline), CAS 91-59-8 (2- Napthylamine), CAS 92-87-5 (Benzidine), CAS 62-53-3 (Aniline), CAS 119-93-7 (3,3'- Dimethylbenzidine), CAS 91-94-1 (3,3'- Dichlorbenzidine) and CAS 119-90-4	-	on request	100€
1151148	preservative in finger pain (EN 71-7)	sorbic acid, benzoic acid, 2- phenoxyethanol, PHB ester	-	on request	100€
1151170	Lead and cadmium in children's toys (CPSC-CH- E1004-11, CPSC-CH-	Lead, cadmium	-	on request	100€

* in individual cases it can happen that there is no reference value available for a listed parameter

Please use the order from on page 50.

cleaning agent

Art. No.	material description	parameter *	additional information	packaging unit	prices
1151072	organic acids	citric acid, formic acid, amidosulfonic acid	-	on request	100€
1151073	oxidizing agent	sodium hypochlorite, hydrogen peroxide, percarbonate	-	60 ml	100€
1151074	reducing agent	sodium dithionite, sulphurous acid, oxalic acid	-	on request	100€
1151075	acid / alkali cleaning agent	pH value, acid reserve, alkali reserve	-	50 ml	100€
1151076	alcohol-based cleaner	ethanol	-	50 ml	100€
1151145	hygienic rinsing agent - disinfectant	DDAC (didecyldimethylammonium chloride), BAC (benzalkonium chloride)	-	on request	100 €
1151146	denaturant	Bitrex (denatonium benzoate)	-	on request	100€
1151147	disinfectant	formaldehyde, glutaraldehyde, triclosan	-	on request	100€

metals

Art. No.	material description	parameter *	additional information	packaging unit	prices
1151000	elemental determination of metal by X-ray fluorescence analysis (XRF)	determination of various elements, e.g. nickel, copper, zinc, lead	-	on request	100€
1151136	chemical analysis of refractory products by X-ray fluorescence (XRF) - Fused cast-bead method (ISO 12677)	Determination of various elements, e.g. nickel, copper, zinc, lead	-	on request	100€

e-cigarettes

Art. No.	material description	parameter *	additional information	packaging unit	prices
1151081	liquids from e-cigarettes	glycerin, propylene glycol, nicotine	-	on request	100€
1151138	liquid from CBD cigarettes	CAS 13956-29-1 Cannabidiol (CBD), CAS 586-62-9 Terpinolene, CAS 5989- 27-5 D-Limonene, CAS 87-44-5 β- Caryophyllene, CAS 13877-91-3 Ocimene, CAS 123-35-3 Myrcene, CAS 80-56-8 α-Pinene, CAS 127-91-3 β- Pinene	-	on request	100€

* in individual cases it can happen that there is no reference value available for a listed parameter

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Please use the order from on page 50.

leather

Art. No.	material description	parameter *	additional information	packaging unit	prices
1151093	identification of leather by microscopy	identification of leather (imitation leather and leather of various animal species)	-	on request	100€
1151094	determination of the total metal content in leather (ISO 17072-2)	chromium, lead, cadmium, nickel, aluminium	-	on request	100€
1151095	determination of water soluble substances in leather	water-soluble substances, water- soluble inorganic substances	-	on request	100€
1151096	determination of volatile substances in leather	Mass of volatile substances	-	on request	100€
1151097	determination of preservatives in leather	CAS 21564-17-0 (TCMTB), CAS 59-50- 7 (CMK), CAS 90-43-7 (OPP), CAS 26530-20-1 (OIT)	-	on request	100€
1151099	determination of aromatic amines from azo dyes in leather	qualitative and quantitative detection of azo dyes over aromatic amines according to ISO 17234-1	-	on request	100€
1151100	determination of 4- aminoazobenzene in leather	CAS 60-09-3 (4-aminoazobenzene) according to ISO 17234-2	-	on request	100€
1151101	chlorophenols in leather	Tetrachlorophenol-, trichlorophenol-, dichlorophenol-, monochlorophenol- isomers and CAS 87-86-5 (pentachlorophenol)	-	on request	100€
1151102	organotin compounds in leather	CAS 1118-46-3 (monobutyltin trichloride), CAS 3091-25-6 (trichlorooctylstannane), CAS 683-18- 1 (dibutyltin dichloride), CAS 3542-36- 7 (dioctyltin dichloride), CAS 1461-22- 9 (tributyltin chloride), CAS 639-58-7 (triphenyltin chloride), CAS 3091-32-5 (tricyclohexyltin chloride), CAS 1461- 25-2 (tetra-n-butyltin)	-	on request	100€
1151103	alkylphenols and alkylphenol ethoxylates in leather	CAS 68412-54-5 (nonylphenol ethoxylate), CAS 9002-93-1 (octylphenol ethoxylate), CAS 84852–15–3 4-(nonylphenol isomer mixture), CAS 140–66–9 (4-tert- octylphenol)	-	on request	100€
1151113	naphthalene in leather	CAS 91-20-3 (naphthalene)	-	on request	100 €
1151137	determination of extractable metals in leather (ISO 17072-1)	e.g. chrome, lead and cadmium	-	on request	100€
1151168	Dimethyl fumarate (DMFU) in footwear materials (ISO 16186)	Dimethyl fumarate (DMFU)	-	on request	100€
1151169	Dimethylformamide (DMF) in footwear materials (ISO 16189)	Dimethylformamide (DMF)	-	on request	100€

* in individual cases it can happen that there is no reference value available for a listed parameter

Please use the order from on page 50.

kitchen utensils and dishes

Art. No.	material description	parameter *	additional information	packaging unit	prices
1151133	release of metals from enamel (ISO 4531)	Release of various metals in the simulant 3% acetic acid	-	on request	100€
1151134	specific migration of lead and cadmium from ceramics (EN 1388-1)	Lead and cadmium in the simulant acetic acid (40 ml/l)	-	on request	100€
1151135	specific migration of cobalt from ceramics	Cobalt in the simulants 4% acetic acid, 0,5% citric acid and 10% acetic acid	-	on request	100€

adhesive

Art. No.	material description	parameter *	additional information	packaging unit	prices
1151139	preservatives in adhesive	Methylisothiazolinone (MIT), Chloromethylisothiazolinone (CIT), Benzisothiazolinone (BIT), Octylisothiazolinone (OIT), Phenoxyethanol	-	on request	100€
1151140	formaldehyde in adhesive	Formaldehyde	-	on request	100€
1151160	Migration of primary aromatic amines in adhesive	CAS 823-40-5 (2,6-Diamino-toluol), CAS 95-80-7 (2,4-Diamino-toluol), CAS 101-77-9 (4,4-Diamino- diphenylmethan), CAS 1208-52-2 (2,4- Diamino-diphenylmethan), CAS 6582- 52-1 (2,2-Diamino-diphenylmethan) in the simulant 3% acetic acid	-	on request	100€

rubber

Art. No.	material description	parameter *	additional information	packaging unit	prices
1151144	determination of the content of PAH in rubber	CAS 91-20-3 (naphthalene), CAS 120- 12-7 (anthracene), CAS 56-55-3 (benzo(a)anthracene), CAS 218-01-9 (chrysene), CAS 205-99-2 (benzo(b)fluoranthene), CAS 207-08-9 (benzo(k)fluoranthene), CAS 205-82-3 (benzo(i)fluoranthene), CAS 192-97-2 (benzo(e)pyrene), CAS 50-70-3 (benzo(a)pyrene), CAS 53-70-3 (dibenz(ah)anthracene) (at least 5 of the parameters quantitative)	-	on request	100 €

* in individual cases it can happen that there is no reference value available for a listed parameter

organoleptic reference material

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Please use the order from on page 50.

films

Art. No.	material description	parameter *	additional information	packaging unit	prices
3351001	sensory testing of food contact materials and articles (FCM) (DIN 10955)	sample set (raw material + instruction) for the intensity testing	-	sample set for one panel	161 €

paper / board

Art. No.	material description	parameter *	additional information	packaging unit	prices
3351003	sensory of board and paper acc. to EN 1230	sample set (raw material + instruction) for the intensity testing	-	sample set for one panel	161 €
3351002	threshold value examination "off flavour"	sample set (raw material + instruction) for the threshold value determination	off-flavour caused by packaging	sample set for one assessor	100€

* in individual cases it can happen that there is no reference value available for a listed parameter

other products / services

Please use the order from on page 50.

material description	description	additional information	packaging unit	price
ADR- security certified DRRR- freezing packaging system RM-ADR VP 1	Our certified packagings fulfill the requirements of ADR especially of the dan-gerous goods directive GGVSE and GGVSee. These systems are also convenient for the shipping of pathogenic bacteria of risk group 2.	guaranteed temperature assurance: 24 hours	VP 1 app. 310 x 250 x 190 mm	16€
ADR- security certified DRRR- freezing packaging system RM-ADR VP 2	Our certified packagings fulfill the requirements of ADR especially of the dan-gerous goods directive GGVSE and GGVSee. These systems are also convenient for the shipping of pathogenic bacteria of risk group 2.	guaranteed temperature assurance: 48 hours	VP 2 app. 350 x 350 x 300 mm	26€

50	order form reference material	Peutsches Referenzbüro für Ringversuche und Referenzmaterialien
quantity	material type / material description / article no.	notes (e.g. time period for regular delivery)

Please notice that we process orders only at a minimum order value of $50 \in$.

Please send order form to: fax-no. +49 (0)8 31/960 878-99 or e-mail: <u>info@DRRR.de</u>

- O An offer with the total costs is needed
- O A Purchase order from the purchasing department will follow

DRRR-customer number	
company	
company (additional line)	
contact person	
street	
post-code /city	
country (if not Germany)	
fon	
fax	
e-mail	
e-mail for invoices	
VAT-ID-No. (if available)	
With your signature you agree with our general terms and	

with our general terms and conditions.

date

signature

quality management / quality assurance

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.

building up and implementation of quality management systems in developing countries. We place our services at your disposal for international questions.

international activities we

also have experience in

Please do not hesitate to contact us.

On the basis of our

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.

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?

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.

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.

Statistics seminar for beginners

This seminar presents the Binomial-, Poissonand 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.

Statistics seminar for advanced learners

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 Qmethod and the robust average after Hampel. 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.

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

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.

The seminar is complemented by practical exercises with the notebook.

The seminar is complemented by practical exercises with the notebook.

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.

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)

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.

For special requirements we also offer customised training programmes.

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

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 nondestructive 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!

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.

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§ 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.

§ 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

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



Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

The DRRR proficiceny tests are available for booking here: <u>Online portal (ODIN)</u> (search with keyword: "pesticide") With the DRRR proficiency tests from the pesticide program, you benefit from the following advantages, among others:

- any number of analytes from this list may be present for identification and quantification in the single PT rounds - important requirements for method validation according to SANTE 11312/2021 (1) fulfilled

- all relevant matrix groups (1.-9.) according to SANTE 11312/2021 (1) available

- use of current pesticides according to EU monitoring program

- laboratory evaluations considering the 70-120 recovery interval according to SANTE 11312/2021 (1)

- evaluation with state of the art statistics

- fast reporting after end of result submission

The proficiency test design takes into account customer requirements in collaboration with the recommendations of leading experts in pesticides analysis. The proficiency test sample design is constructed with 3 samples each, so that 2 different concentration ranges and a blank sample are covered.

(1) SANTE 11312/2021 Analytical quality control and method validation procedures for pesticide residues analysis in food and feed.

1-Naphthylacetamide and 1-naphthylacetic acid (sum of 1-naphthylacetamide and 1- naphthylacetic acid and its salts, expressed as 1-naphythlacetic acid)	Flusilazole
2,4-D (sum of 2,4-D, its salts, its esters and its conjugates, expressed as 2,4-D)	Flutriafol
Abamectin (sum of avermectin B1a, avermectin B1b and delta-8,9 isomer of avermectin B1a, expressed as avermectin B1a)	Fluvalinate (sum of isomers) resulting from the use of tau-fluvalinate
Acephate	Fluxapyroxad
Acetamiprid	Folpet (sum of folpet and phtalimide, expressed as folpet)
Aclonifen	Forchlorfenuron
Acrinathrin	Formetanate: Sum of formetanate and its salts expressed as formetanate (hydrochloride)
Aldicarb (sum of aldicarb, its sulfoxide and its sulfone, expressed as aldicarb)	Fosetyl-Al (sum of fosetyl, phosphonic acid and their salts, expressed as fosetyl)
Aldrin and Dieldrin (Aldrin and dieldrin combined expressed as dieldrin)	Fosthiazate
Anthraquinone	Glyphosate
Azadirachtin	Haloxyfop (Sum of haloxyfop, its esters, salts and conjugates expressed as haloxyfop (sum of the R- and S- isomers at any ratio)) (R) (F)
Azinphos-ethyl	Heptachlor (sum of heptachlor and heptachlor epoxide expressed as heptachlor)
Azinphos-methyl	Hexachlorobenzene
Azoxystrobin	Hexachlorocyclohexane (HCH), alpha-isomer
Benzalkonium chloride (mixture of alkylbenzyldimethylammonium chlorides with alkyl chain lengths of C8, C10, C12, C14, C16 and C18)	Hexachlorocyclohexane (HCH), beta-isomer
Bifenthrin (sum of isomers)	Hexaconazole
Bromide ion	Hexythiazox (any ratio of constituent isomers)
Bromophos-ethyl	Imazalil (any ratio of constituent isomers)
Bupirimate	Imidacloprid
Buprofezin	Indoxacarb (sum of indoxacarb and its R enantiomer)



Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

Captan (Sum of captan and THPI, expressed as captan)	Iprodione
Carbaryl	lprovalicarb
Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)	Isoprothiolane
Carbofuran (sum of carbofuran (including any carbofuran generated from carbosulfan, benfuracarb or furathiocarb) and 3-OH carbofuran expressed as carbofuran)	Kresoxim-methyl
Chlorantraniliprole	Lambda-cyhalothrin (includes gamma-cyhalothrin) (sum of R,S and S,R isomers)
Chlorat	Linuron
Chlordane (sum of cis- and trans-chlordane)	Lufenuron (any ratio of constituent isomers)
Chlorfenapyr	Malathion (sum of malathion and malaoxon expressed as malathion)
Chloridazon (sum of chloridazon and chloridazon-desphenyl, expressed as chloridazon)	Maleic hydrazide
Chlormequat (sum of chlormequat and its salts, expressed as chlormequat-chloride)	Mandipropamid (any ratio of constituent isomers)
Chlorothalonil	Mepiquat (sum of mepiquat and its salts, expressed as mepiquat chloride)
Chlorpropham	Metalaxyl and metalaxyl-M (metalaxyl including other mixtures of constituent isomers including metalaxyl-M (sum of isomers))
Chlorpyrifos	Metazachlor (Sum of metabolites 479M04, 479M08 and 479M16, expressed as metazachlor)
Chlorpyrifos-methyl	Methamidophos
Clofentezine	Methidathion
Clomazone	Methiocarb (sum of methiocarb and methiocarb sulfoxide and sulfone, expressed as methiocarb)
Clothianidin	Methomyl
Coumaphos	Methoxyfenozide
Cyantraniliprole	Metrafenone
Cyazofamid	Monocrotophos
Cyflufenamid (sum of cyflufenamid (Z-isomer) and its E-isomer, expressed as cyflufenamid)	Myclobutanil (sum of constituent isomers)
Cyfluthrin (cyfluthrin including other mixtures of constituent isomers (sum of isomers))	Nicotine
Cymoxanil	Novaluron
Cypermethrin (cypermethrin including other mixtures of constituent isomers (sum of isomers))	Omethoate
Cyproconazole	Oxamyl
Cyprodinil	Paclobutrazol (sum of constituent isomers)



Cyromazine	Parathion
DDT (sum of p,p'-DDT, o,p'-DDT, p-p'-DDE and p,p'-TDE (DDD) expressed as DDT)	Parathion-methyl (sum of Parathion-methyl and paraoxon-methyl expressed as Parathion-methyl)
Deltamethrin (cis-deltamethrin)	Penconazole (sum of constituent isomers)
Diazinon	Pendimethalin
Dichlorvos	Permethrin (sum of isomers)
Dicofol (sum of p, p´ and o,p´ isomers)	Phenmedipham
Didecyldimethylammonium chloride (mixture of alkyl-quaternary ammonium salts with alkyl chain lengths of C8, C10 and C12)	Phenothrin (phenothrin including other mixtures of constituent isomers (sum of isomers))
Difenoconazole	Phosmet (phosmet and phosmet oxon expressed as phosmet)
Diflubenzuron	Pirimicarb
Dimethoate	Pirimiphos-methyl
Dimethomorph (sum of isomers)	Prochloraz (sum of prochloraz, BTS 44595 (M201-04) and BTS 44596 (M201-03), expressed as prochloraz)
Diphenylamine	Profenofos
Diquat	Propamocarb (Sum of propamocarb and its salts, expressed as propamocarb)
Disulfoton (sum of disulfoton, disulfoton sulfoxide and disulfoton sulfone expressed as disulfoton)	Propargite
Dithianon	Propiconazole (sum of isomers)
Dodine	Propyzamide
Emamectin B1a and its salts, expressed as emamectin B1a (free base)	Proquinazid
Endosulfan (sum of alpha- and beta-isomers and endosulfan-sulphate expressed as endosulfan)	Prosulfocarb
Endrin	Prothioconazole: prothioconazole-desthio (sum of isomers)
Epoxiconazole	Pyraclostrobin
Ethephon	Pyridaben
Ethion	Pyrimethanil
Ethirimol	Pyriproxyfen
Ethofumesate (Sum of ethofumesate, 2-keto-ethofumesate, open-ring-2-keto- ethofumesate and its conjugate, expressed as ethofumesate)	Quinalphos
Ethoprophos	Quintozene (sum of quintozene and pentachloro-aniline expressed as quintozene)
Ethylene oxide (sum of ethylene oxide and 2-chloro-ethanol expressed as ethylene oxide)	Spinetoram (sum of spinetoram-J and spinetoram-L)



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Etofenprox	Spinosad (spinosad, sum of spinosyn A and spinosyn D)
Etoxazole	Spirodiclofen
Famoxadone	Spiromesifen
Fenazaquin	Spirotetramat and spirotetramat-enol (sum of), expressed as spirotetramat
Fenbuconazole (sum of constituent enantiomers)	Spiroxamine (sum of isomers)
Fenbutatin oxide	Sulfoxaflor (sum of isomers)
Fenhexamid	Tebuconazole
Fenitrothion	Tebufenozide
Fenoxycarb	Tebufenpyrad
Fenpropathrin	Tefluthrin (tefluthrin including other mixtures of constituent isomers (sum of isomers))
Fenpropidin (sum of fenpropidin and its salts, expressed as fenpropidin)	Terbuthylazine
Fenpropimorph (sum of isomers)	Tetraconazole
Fenpyrazamine	Thiabendazole
Fenpyroximate	Thiacloprid
Fenthion (fenthion and its oxigen analogue, their sulfoxides and sulfone expressed as parent)	Thiamethoxam
Fenvalerate (any ratio of constituent isomers (RR, SS, RS & SR) including esfenvalerate)	Thiophanate-methyl
Fipronil (sum fipronil + sulfone metabolite (MB46136) expressed as fipronil)	Triadimenol (any ratio of constituent isomers)
Flonicamid (sum of flonicamid, TFNA and TFNG expressed as flonicamid)	Triazophos
Fluazifop-P (sum of all the constituent isomers of fluazifop, its esters and its conjugates, expressed as fluazifop)	Tricyclazole
Flucythrinate (flucythrinate including other mixtures of constituent isomers (sum of isomers))	Trifloxystrobin
Fludioxonil	Triflumizole: Triflumizole and metabolite FM-6-1(N-(4-chloro-2-trifluoromethylphenyl)- n-propoxyacetamidine), expressed as Triflumizole
Fluopicolide	Triflumuron
Fluopyram	Trinexapac (sum of trinexapac (acid) and its salts, expressed as trinexapac)
Flupyradifurone	Vinclozolin
Fluroxypyr (sum of fluroxypyr, its salts, its esters, and its conjugates, expressed as fluroxypyr)	Zoxamide