

# Consumer goods and Packaging

## product catalogue 2026



chemical-physical

organoleptic

immunological, molecular  
biological & microbiological

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# reference material

## Importance

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

**Description reference material**

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

**Profit with our high quality standards for your lab work**

## Characteristics

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

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

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

## Identification

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

**Availability and order request of reference material**

# Reference material - chemical-physical

Art. no.	material description	Parameters [*]	additional information / packaging unit / price:
<b>Plastics, plastic film</b>			on request: <a href="mailto:info@drrr.de">info@drrr.de</a>
1151001	<b>Plastic - overall migration (one-sided contact) (EN 1186-3)</b>	<input type="checkbox"/> overall migration (ethanol 10%) [mg/dm <sup>2</sup> ], overall migration (ethanol 20%) [mg/dm <sup>2</sup> ], overall migration (ethanol 50%) [mg/dm <sup>2</sup> ], overall migration (acetic acid 3%) [mg/dm <sup>2</sup> ], overall migration (dist. water) [mg/dm <sup>2</sup> ], overall migration (vegetable oil) [mg/dm <sup>2</sup> ]	
1151002	<b>Plastic - overall migration (total immersion) (EN 1186-3)</b>	<input type="checkbox"/> overall migration (ethanol 10%) [mg/dm <sup>2</sup> ], overall migration (ethanol 20%) [mg/dm <sup>2</sup> ], overall migration (ethanol 50%) [mg/dm <sup>2</sup> ], overall migration (acetic acid 3%) [mg/dm <sup>2</sup> ], overall migration (dist. water) [mg/dm <sup>2</sup> ], overall migration (vegetable oil) [mg/dm <sup>2</sup> ]	
1151044	<b>Plastic - overall migration (article filling) (EN 1186-3)</b>	<input type="checkbox"/> overall migration (ethanol 10%) [mg/kg], overall migration (ethanol 20%) [mg/kg], overall migration (ethanol 50%) [mg/kg], overall migration (acetic acid 3%) [mg/kg]	
1151045	<b>Plastic - overall migration (fatty test food, total immersion) (EN 1186-3)</b>	<input type="checkbox"/> overall migration (ethanol 95%) [mg/dm <sup>2</sup> ], overall migration (ISO octane) [mg/dm <sup>2</sup> ]	
1151056	<b>Plastic, silicone - overall migration using MPPO</b>	<input type="checkbox"/> overall migration: 1. migration (MPPO) [mg/dm <sup>2</sup> ], overall migration: 2. migration (MPPO) [mg/dm <sup>2</sup> ], overall migration: 3. migration (MPPO) [mg/dm <sup>2</sup> ]	
1151167	<b>Plastic - overall migration (fatty test food, one-sided contact) (EN 1186-3)</b>	<input type="checkbox"/> overall migration (ethanol 95%) [mg/dm <sup>2</sup> ], overall migration (ISO octane) [mg/dm <sup>2</sup> ]	
1151003	<b>Plastic - specific migration caprolactam</b>	<input type="checkbox"/> caprolactam (ethanol 10%) [mg/dm <sup>2</sup> ], caprolactam (ethanol 20%) [mg/dm <sup>2</sup> ], caprolactam (ethanol 50%) [mg/dm <sup>2</sup> ], caprolactam (acetic acid 3%) [mg/dm <sup>2</sup> ], caprolactam (dist. water) [mg/dm <sup>2</sup> ], caprolactam (vegetable oil) [mg/dm <sup>2</sup> ]	
1151004	<b>Plastic - specific migration terephthalic acid</b>	<input type="checkbox"/> terephthalic acid (ethanol 10%) [mg/kg], terephthalic acid (ethanol 50%) [mg/kg], terephthalic acid (acetic acid 3%) [mg/kg], terephthalic acid (dist. water) [mg/kg], terephthalic acid (vegetable oil) [mg/kg]	
1151005	<b>Plastic - specific migration acrylonitrile (EN 13130-3)</b>	<input type="checkbox"/> acrylonitrile (ethanol 10%) [mg/kg], acrylonitrile (acetic acid 3%) [mg/kg], acrylonitrile (dist. water) [mg/kg], acrylonitrile (vegetable oil) [mg/kg]	
1151158	<b>Plastic - specific migration metals part 1</b>	<input type="checkbox"/> antimony (Sb) (dist. water) [mg/kg], antimony (Sb) (acetic acid 3%) [mg/kg], arsenic (As) (dist. water) [mg/kg], arsenic (As) (acetic acid 3%) [mg/kg], cadmium (Cd) (dist. water) [mg/kg], cadmium (Cd) (acetic acid 3%) [mg/kg], aluminium (Al) (dist. water) [mg/kg], aluminium (Al) (acetic acid 3%) [mg/kg], nickel (Ni) (dist. water) [mg/kg], nickel (Ni) (acetic acid 3%) [mg/kg]	
1151159	<b>Plastic - specific migration metals part 2</b>	<input type="checkbox"/> chromium (Cr) (dist. water) [mg/kg], chromium (Cr) (acetic acid 3%) [mg/kg], lead (Pb) (dist. water) [mg/kg], lead (Pb) (acetic acid 3%) [mg/kg], iron (Fe) (dist. water) [mg/kg], iron (Fe) (acetic acid 3%) [mg/kg], barium (Ba) (dist. water) [mg/kg], barium (Ba) (acetic acid 3%) [mg/kg], zinc (Zn) (dist. water) [mg/kg], zinc (Zn) (acetic acid 3%) [mg/kg]	
1151050	<b>Plastic - phthalate content</b>	<input type="checkbox"/> DBP (CAS 84-74-2) [g/100g], BBP (CAS 85-68-7) [g/100g], DEHP (CAS 117-81-7) [g/100g], DNOP (CAS 117-84-0) [g/100g], DINP (CAS 28553-12-0) [g/100g], DIDP (CAS 26761-40-0) [g/100g], DEP (CAS 84-66-2) [g/100g], DMP (CAS 131-11-3) [g/100g], DIBP (CAS 84-69-5) [g/100g], DPP (CAS 131-18-0) [g/100g], DHEXP (CAS 84-75-3) [g/100g], DCHP (CAS 84-61-7) [g/100g]	
1151062	<b>Plastic - bisphenol content</b>	<input type="checkbox"/> bisphenol A (CAS 80-05-7) [µg/kg], bisphenol B (CAS 77-40-7) [µg/kg], bisphenol F (CAS 620-92-8) [µg/kg], bisphenol S (CAS 80-09-1) [µg/kg], bisphenol AF (CAS 1478-61-1) [µg/kg]	
1151132	<b>Plastic - PAH content</b>	<input type="checkbox"/> benzo[a]pyrene (CAS 50-32-8) [mg/kg], benzo[a]anthracene (CAS 56-55-3) [mg/kg], chrysene (CAS 218-01-9) [mg/kg], benzo[e]pyrene (CAS 192-97-2) [mg/kg], benzo[b]fluoranthene (CAS 205-99-2) [mg/kg], benzo[j]fluoranthene (CAS 205-82-3) [mg/kg], benzo[k]fluoranthene (CAS 207-08-9) [mg/kg], dibenzo[a,h]anthracene (CAS 53-70-3) [mg/kg]	
1151173	<b>Plastic, silicone - volatile fractions</b>	<input type="checkbox"/> Mass fraction of volatile substances [% (m/m)]	
1151225	<b>Plastic - PFAS</b>	<input type="checkbox"/> total perfluorohexane sulfonic acid (CAS 355-46-4) [µg/kg], total perfluorooctanesulfonic acid (CAS 1763-23-1) [µg/kg], total perfluorohexanoic acid (CAS 307-24-4) [µg/kg], total perfluorooctanoic acid (CAS 335-67-1) [µg/kg], total perfluorononanoic acid (CAS 375-95-1) [µg/kg], total perfluorodecanoic acid (CAS 335-76-2) [µg/kg], total perfluorundecanoic acid (CAS 2058-94-8) [µg/kg], total perfluorododecanoic acid (CAS 307-55-1) [µg/kg], total perfluorotridecanoic acid (CAS 72629-94-8) [µg/kg], total perfluorotetradecanoic acid (CAS 376-06-7) [µg/kg], total fluor (TF) [mg/kg], total organic fluor (TOF) [mg/kg]	

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

# Reference material - chemical-physical

Art. no.	material description	Parameters [*]	additional information / packaging unit / price:
<b>Paper and board</b>			on request: <a href="mailto:info@drrr.de">info@drrr.de</a>
1151015	<b>Mineral oil in cardboard</b>	<input type="checkbox"/> MOSH C10-C16 [mg/kg], MOSH C16-C20 [mg/kg], MOSH C20-C25 [mg/kg], MOSH C25-C35 [mg/kg], MOAH C10-C16 [mg/kg], MOAH C16-C25 [mg/kg], MOAH C25-C35 [mg/kg], MOSH C10-C35 [mg/kg], MOAH C10-C35 [mg/kg]	
1151052	<b>Migration of mineral oil from cardboard</b>	<input type="checkbox"/> MOSH C10-C16 [mg/dm <sup>2</sup> ], MOSH C16-C20 [mg/dm <sup>2</sup> ], MOSH C20-C25 [mg/dm <sup>2</sup> ], MOSH C25-C35 [mg/dm <sup>2</sup> ], MOAH C10-C16 [mg/dm <sup>2</sup> ], MOAH C16-C25 [mg/dm <sup>2</sup> ], MOAH C25-C35 [mg/dm <sup>2</sup> ], MOSH C10-C35 [mg/dm <sup>2</sup> ], MOAH C10-C35 [mg/dm <sup>2</sup> ]	
1151055	<b>Migration from paper, board using MPPO (EN 14338)</b>	<input type="checkbox"/> overall migration (MPPO) [mg/dm <sup>2</sup> ]	
1151067	<b>Colour fastness of dyed paper (EN 646)</b>	<input type="checkbox"/> colour fastness (dist. Water) [-], colour fastness (acetic acid 3%) [-], colour fastness (olive oil) [-], colour fastness (alkali salt solution) [-]	
1151149	<b>Paper, cardboard - overall migration (fatty test food, solvent extract) (EN 15519)</b>	<input type="checkbox"/> overall migration (ethanol 95%) [mg/dm <sup>2</sup> ], overall migration (ISO octane) [mg/dm <sup>2</sup> ]	
1151187	<b>Paper, cardboard - PFAS</b>	<input type="checkbox"/> total perfluorooctanesulfonic acid (CAS 1763-23-1) [µg/kg], total perfluorooctanoic acid (CAS 335-67-1) [µg/kg], total perfluorononanoic acid (CAS 375-95-1) [µg/kg], total perfluorohexane sulfonic acid (CAS 355-46-4) [µg/kg], total perfluorohexanoic acid (CAS 307-24-4) [µg/kg], total perfluorodecanoic acid (CAS 335-76-2) [µg/kg], total perfluorundecanoic acid (CAS 2058-94-8) [µg/kg], total perfluorododecanoic acid (CAS 307-55-1) [µg/kg], total perfluorotridecanoic acid (CAS 72629-94-8) [µg/kg], total perfluorotetradecanoic acid (CAS 376-06-7) [µg/kg], 6:2 FTOH (CAS 647-42-7) [µg/kg], 8:2 FTOH (CAS 678-39-7) [µg/kg], 10:2 FTOH (CAS 865-86-1) [µg/kg], 12:2 FTOH (CAS 39239-77-5) [µg/kg], 6:2 FTA (CAS 17527-29-6) [µg/kg], 8:2 FTA (CAS 27905-45-9) [µg/kg], 10:2 FTA (CAS 17741-60-5) [µg/kg], 6:2 FTMA (CAS 2144-53-8) [µg/kg], 8:2 FTMA (CAS 1996-88-9) [µg/kg], total fluor (TF) [mg/kg]	
<b>Kitchen utensils and dishes</b>			
1151134	<b>Ceramics - release of lead and cadmium (EN 1388-1)</b>	<input type="checkbox"/> lead (Pb) [mg/l], cadmium (Cd) [mg/l]	
1151201	<b>Metals and alloys - release of metals part 1</b>	<input type="checkbox"/> aluminum (Al) [mg/kg], antimony (Sb) [mg/kg], chromium (Cr) [mg/kg], cobalt (Co) [mg/kg], copper (Cu) [mg/kg], iron (Fe) [mg/kg], magnesium (Mg) [mg/kg], manganese (Mn) [mg/kg], molybdenum (Mo) [mg/kg], nickel (Ni) [mg/kg], silver (Ag) [mg/kg], tin (Sn) [mg/kg], titanium (Ti) [mg/kg], vanadium (V) [mg/kg], zinc (Zn) [mg/kg], zirconium (Zr) [mg/kg]	
1151202	<b>Metals and alloys - release of metals part 2</b>	<input type="checkbox"/> aluminum (Al) [mg/kg], antimony (Sb) [mg/kg], chromium (Cr) [mg/kg], cobalt (Co) [mg/kg], copper (Cu) [mg/kg], iron (Fe) [mg/kg], magnesium (Mg) [mg/kg], manganese (Mn) [mg/kg], molybdenum (Mo) [mg/kg], nickel (Ni) [mg/kg], silver (Ag) [mg/kg], tin (Sn) [mg/kg], titanium (Ti) [mg/kg], vanadium (V) [mg/kg], zinc (Zn) [mg/kg], zirconium (Zr) [mg/kg], envelope volume [cm <sup>3</sup> ]	
<b>Rubber</b>			
1151144	<b>Rubber - PAH content</b>	<input type="checkbox"/> benzo[a]pyrene (CAS 50-32-8) [mg/kg], anthracene (CAS 120-12-7) [mg/kg], benzo[a]anthracene (CAS 56-55-3) [mg/kg], chrysene (CAS 218-01-9) [mg/kg], fluoranthene (CAS 206-44-0) [mg/kg]	

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

## Reference material - chemical-physical

Art. no.	material description	Parameters [*]	additional information / packaging unit / price:
<b>Cosmetics</b>			
1151023	<b>Care products</b>	<input type="checkbox"/> methyl 4-hydroxybenzoate calculated as acid [g/100g], propyl 4-hydroxybenzoate calculated as acid [g/100g], n-butyl 4-hydroxybenzoate calculated as acid [g/100g], 2-phenoxyethanol [g/100g], benzoic acid [g/100g], sorbic acid [g/100g], methylisothiazolinone [mg/kg], isobutyl 4-hydroxybenzoate calculated as acid [g/100g]	on request: <a href="mailto:info@drrr.de">info@drrr.de</a>
1151024	<b>Shampoo, lotion</b>	<input type="checkbox"/> density [g/ml], pH value [-], dry matter [g/100g], water content [g/100g], urea [g/100g], aw value [-]	
1151026	<b>Dental care - total fluoride</b>	<input type="checkbox"/> total fluoride [g/100g]	
1151071	<b>Cosmetics - heavy metals (ISO 21392)</b>	<input type="checkbox"/> lead (Pb) [mg/kg], arsenic (As) [mg/kg], antimony (Sb) [mg/kg], nickel (Ni) [mg/kg], cobalt (Co) [mg/kg], cadmium (Cd) [mg/kg], chromium (Cr) [mg/kg]	
1151028	<b>Cosmetics - UV filters</b>	<input type="checkbox"/> EHS (CAS 118-60-5) [g/100g], BMDM (CAS 70356-09-1) [g/100g], EHT (CAS 88122-99-0) [g/100g], PBSA (CAS 27503-81-7) [g/100g], OC calculated as acid (CAS 6197-30-4) [g/100g], titanium dioxide (CAS 13463-67-7) [g/100g], HMS (CAS 118-56-9) [g/100g], BEMT (CAS 187393-00-6) [g/100g], DHHB (CAS 302776-68-7) [g/100g], DEBT (CAS 154702-15-5) [g/100g], PDTA (CAS 180898-37-7) [g/100g], TDSA (CAS 90457-82-2) [g/100g], BZ4 (CAS 4065-45-6) [g/100g], BZ3 (CAS 131-57-7) [g/100g], IMC (CAS 71617-10-2) [g/100g], MBC (CAS 36861-47-9) [g/100g], EHPD (CAS 21245-02-3) [g/100g], EPMC (CAS 5466-77-3) [g/100g], MBBT (CAS 103597-45-1) [g/100g], P15 (CAS 207574-74-1) [g/100g]	
<b>Leather</b>			
1151094	<b>Leather – total metal content (ISO 17072-2)</b>	<input type="checkbox"/> chromium (Cr) [mg/kg], nickel (Ni) [mg/kg], cadmium (Cd) [mg/kg], lead (Pb) [mg/kg], zirconium (Zr) [mg/kg], iron (Fe) [mg/kg], aluminium (Al) [mg/kg], titanium (Ti) [mg/kg]	
1151194	<b>Leather - PFAS (ISO 23702-1)</b>	<input type="checkbox"/> total perfluorohexane sulfonic acid (CAS 355-46-4) [µg/kg], total perfluorooctanesulfonic acid (CAS 1763-23-1) [µg/kg], total perfluorohexanoic acid (CAS 307-24-4) [µg/kg], total perfluorooctanoic acid (CAS 335-67-1) [µg/kg], total perfluorononanoic acid (CAS 375-95-1) [µg/kg], total perfluorodecanoic acid (CAS 335-76-2) [µg/kg], total perfluoroundecanoic acid (CAS 2058-94-8) [µg/kg], total perfluorododecanoic acid (CAS 307-55-1) [µg/kg], total perfluorotridecanoic acid (CAS 72629-94-8) [µg/kg], total perfluorotetradecanoic acid (CAS 376-06-7) [µg/kg], 6:2 FTOH (CAS 647-42-7) [µg/kg], 8:2 FTOH (CAS 678-39-7) [µg/kg], 10:2 FTOH (CAS 865-86-1) [µg/kg], 12:2 FTOH (CAS 39239-77-5) [µg/kg], 6:2 FTA (CAS 17527-29-6) [µg/kg], 8:2 FTA (CAS 27905-45-9) [µg/kg], 10:2 FTA (CAS 17741-60-5) [µg/kg], 6:2 FTMA (CAS 2144-53-8) [µg/kg], 8:2 FTMA (CAS 1996-88-9) [µg/kg], total fluor (TF) [mg/kg]	
1151212	<b>Leather - chromium (VI)</b>	<input type="checkbox"/> chromium VI (Cr VI) [mg/kg]	
1151186	<b>Leather - bisphenols (ISO 11936)</b>	<input type="checkbox"/> bisphenol A (CAS 80-05-7) [mg/kg], bisphenol B (CAS 77-40-7) [mg/kg], bisphenol F (CAS 620-92-8) [mg/kg], bisphenol S (CAS 80-09-1) [mg/kg]	
<b>Textiles</b>			
1151020	<b>Textiles – phosphorus flame retardants (ISO 17881-2)</b>	<input type="checkbox"/> tributyl phosphate (CAS 126-73-8) [mg/kg], o-triskresyl phosphate (CAS 78-30-8) [mg/kg], tris(2-chloroethyl)-phosphate (CAS 115-96-8) [mg/kg], tris(2-chloro-1-methylethyl)-phosphate (CAS 13674-84-5) [mg/kg]	
1151087	<b>Textiles - PFAS (solvent extraction)</b>	<input type="checkbox"/> total perfluorooctanesulfonic acid (CAS 1763-23-1) [µg/kg], total perfluorooctanoic acid (CAS 335-67-1) [µg/kg], total perfluorononanoic acid (CAS 375-95-1) [µg/kg], total perfluorohexane sulfonic acid (CAS 355-46-4) [µg/kg], total perfluorohexanoic acid (CAS 307-24-4) [µg/kg], total perfluorodecanoic acid (CAS 335-76-2) [µg/kg], total perfluoroundecanoic acid (CAS 2058-94-8) [µg/kg], total perfluorododecanoic acid (CAS 307-55-1) [µg/kg], total perfluorotridecanoic acid (CAS 72629-94-8) [µg/kg], total perfluorotetradecanoic acid (CAS 376-06-7) [µg/kg], total perfluorobutanoic acid (CAS 375-22-4) [µg/kg], total perfluoropentanoic acid (CAS 2706-90-3) [µg/kg], total perfluoroheptanoic acid (CAS 375-85-9) [µg/kg], total perfluorobutane sulfonic acid (CAS 375-73-5) [µg/kg], 6:2 FTA (CAS 17527-29-6) [µg/kg], 8:2 FTA (CAS 27905-45-9) [µg/kg], 10:2 FTA (CAS 17741-60-5) [µg/kg], 6:2 FTMA (CAS 2144-53-8) [µg/kg], 8:2 FTMA (CAS 1996-88-9) [µg/kg], 10:2 FTMA (CAS 2144-54-9) [µg/kg]	
1151090	<b>Textiles - phthalate content (ISO 14389)</b>	<input type="checkbox"/> DINP (CAS 28553-12-0) [mg/kg], DEHP (CAS 117-81-7) [mg/kg], DNOP (CAS 117-84-0) [mg/kg], DIDP (CAS 26761-40-0) [mg/kg], BBP (CAS 85-68-7) [mg/kg], DBP (CAS 84-74-2) [mg/kg], DIBP (CAS 84-69-5) [mg/kg], DPP (CAS 131-18-0) [mg/kg], DIHP (CAS 71888-89-6) [mg/kg], DMEP (CAS 117-82-8) [mg/kg]	
1151091	<b>Textiles - PAH (EN 17132)</b>	<input type="checkbox"/> benzo[a]pyrene (CAS 50-32-8) [mg/kg], benzo[a]anthracene (CAS 56-55-3) [mg/kg], chrysene (CAS 218-01-9) [mg/kg], naphthalene (CAS 91-20-3) [mg/kg], benzo[e]pyrene (CAS 192-97-2) [mg/kg], benzo[b]fluoranthene (CAS 205-99-2) [mg/kg], benzo[j]fluoranthene (CAS 205-82-3) [mg/kg], benzo[k]fluoranthene (CAS 207-08-9) [mg/kg], dibenzo[a,h]anthracene (CAS 53-70-3) [mg/kg]	
1151213	<b>Textiles - bisphenols</b>	<input type="checkbox"/> bisphenol A (CAS 80-05-7) [mg/kg], bisphenol B (CAS 77-40-7) [mg/kg], bisphenol F (CAS 620-92-8) [mg/kg], bisphenol S (CAS 80-09-1) [mg/kg]	
1151229	<b>Textiles - PFAS (EN 17681-1, alkaline hydrolysis)</b>	<input type="checkbox"/> total perfluorooctanesulfonic acid (CAS 1763-23-1) [µg/kg], total perfluorooctanoic acid (CAS 335-67-1) [µg/kg], total perfluorononanoic acid (CAS 375-95-1) [µg/kg], total perfluorohexane sulfonic acid (CAS 355-46-4) [µg/kg], total perfluorohexanoic acid (CAS 307-24-4) [µg/kg], total perfluorodecanoic acid (CAS 335-76-2) [µg/kg], total perfluoroundecanoic acid (CAS 2058-94-8) [µg/kg], total perfluorododecanoic acid (CAS 307-55-1) [µg/kg], total perfluorotridecanoic acid (CAS 72629-94-8) [µg/kg], total perfluorotetradecanoic acid (CAS 376-06-7) [µg/kg], total perfluorobutanoic acid (CAS 375-22-4) [µg/kg], total perfluoropentanoic acid (CAS 2706-90-3) [µg/kg], total perfluoroheptanoic acid (CAS 375-85-9) [µg/kg], total perfluorobutane sulfonic acid (CAS 375-73-5) [µg/kg], 6:2 FTOH (CAS 647-42-7) [mg/kg], 8:2 FTOH (CAS 678-39-7) [mg/kg], 10:2 FTOH (CAS 865-86-1) [mg/kg], 12:2 FTOH (CAS 39239-77-5) [mg/kg], total fluor (TF) [mg/kg], total organic fluor (TOF) [mg/kg]	

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# Reference material - chemical-physical

Art. no.	material description	Parameters [*]	additional information / packaging unit / price:
<b>Toys</b>			
1151040	<b>Scrapped-off materials - elements (EN 71-3)</b>	<input type="checkbox"/> tin (Sn) [mg/kg], zinc (Zn) [mg/kg], nickel (Ni) [mg/kg], strontium (Sr) [mg/kg], antimony (Sb) [mg/kg], barium (Ba) [mg/kg], cadmium (Cd) [mg/kg], cobalt (Co) [mg/kg], lead (Pb) [mg/kg], chromium III (Cr III) [mg/kg], chromium VI (Cr VI) [mg/kg], chromium (Cr) [mg/kg], aluminium (Al) [mg/kg], arsenic (As) [mg/kg], copper (Cu) [mg/kg], manganese (Mn) [mg/kg], mercury (Hg) [mg/kg], selenium (Se) [mg/kg]	on request: <a href="mailto:info@drrr.de">info@drrr.de</a>
<b>Jewellery</b>			
1151043	<b>Jewellery (acc. to EN 1811)</b>	<input type="checkbox"/> surface area [cm <sup>2</sup> ], nickel release [µg/cm <sup>2</sup> /week]	

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

# Reference material - immunological, molecular biological & microbiological

Art. no.	material description	Parameters [*]	risk group	additional information / packaging unit / price:
<b>Canning, glass</b>				on request: <a href="mailto:info@drrr.de">info@drrr.de</a>
2251004	Detection of mesophilic microbial load in canned food	<input type="checkbox"/> mesophilic germ load (pos./neg.)	risk group 1	
2251019	Detection of thermophilic microbial load in canned food	<input type="checkbox"/> thermophilic germ load (55°C) (pos./neg.)	risk group 1	
2251020	Detection of anaerobic mesophilic spore load in canned food	<input type="checkbox"/> anaerobic mesophilic germ load (pos./neg.)	risk group 2	
<b>Plastic surface</b>				
2251001	Surface testing - enumeration moulds	<input type="checkbox"/> moulds [cfu/100 cm <sup>2</sup> ]	risk group 1	
2251002	Surface testing - enumeration aerobic bacteria	<input type="checkbox"/> aerobic total count [cfu/100 cm <sup>2</sup> ]	risk group 1	
2251037	Surface testing - enumeration Enterobacteriaceae	<input type="checkbox"/> Enterobacteriaceae [cfu/100 cm <sup>2</sup> ]	risk group 1	
2251038	Surface testing - enumeration Listeria spp.	<input type="checkbox"/> Listeria spp. [cfu/100 cm <sup>2</sup> ]	risk group 2	
<b>Paper and board</b>				
2251029	Paper - transition of antimicrobial components (EN 1104)	<input type="checkbox"/> antibacterial effect Bacillus subtilis [mm], antimycotic effect Aspergillus niger [mm] (pos./neg.)		
2251039	Paper, board - enumeration of aerobic bacteria (ISO 8784-2)	<input type="checkbox"/> aerobic total count	risk group 1	
2251040	Paper, board - enumeration of moulds (ISO 8784-2)	<input type="checkbox"/> moulds	risk group 1	
<b>Cosmetic</b>				
2251005	Enumeration of aerobic bacteria in O W emulsion	<input type="checkbox"/> aerobic total count [cfu/g]	risk group 1	
2251006	Enumeration of moulds in O W emulsion	<input type="checkbox"/> moulds [cfu/g]	risk group 1	
2251007	Detection of E. coli in O W emulsion	<input type="checkbox"/> E.coli (pos./neg.)	risk group 2	
2251008	Detection of S.aureus in O W emulsion	<input type="checkbox"/> S.aureus (pos./neg.)	risk group 2	
2251009	Identification of microorganism in O W emulsion	<input type="checkbox"/> identification of germs	risk group 2	
2251010	Detection of C.albicans in O W emulsion	<input type="checkbox"/> C.albicans (pos./neg.)	risk group 2	
2251011	Detection of P.aeruginosa in O W emulsion	<input type="checkbox"/> Ps.aeruginosa (pos./neg.)	risk group 2	
2251028	Challenge test	<input type="checkbox"/> Ps.aeruginosa [CFU/g], S.aureus [CFU/g], E.coli [CFU/g], C.albicans [CFU/g], A.brasiliensis [CFU/g]	risk group 2	
<b>Textiles</b>				
2251024	Antimicrobial Fabric Test textiles - AATCC 100	<input type="checkbox"/> antibacterial activity S.aureus [% reduction], antibacterial activity K.pneumoniae [% reduction]		
2251025	Antibacterial Parallel Streak textiles - AATCC 147	<input type="checkbox"/> antibacterial activity S.aureus, antibacterial activity K.pneumoniae (pos./neg.)		
2251026	Antibacterial Activity textiles - ISO 20743	<input type="checkbox"/> antibacterial activity S.aureus [log10 reduction], antibacterial activity K.pneumoniae [log10 reduction]		
<b>Tattoo ink</b>				
2251012	Enumeration of aerobic bacteria in tattoo ink	<input type="checkbox"/> aerobic total count [cfu/g]	risk group 1	

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

# Reference material - immunological, molecular biological & microbiological



Art. no.	material description	Parameters [*]	risk group	additional information / packaging unit / price:
<b>Disinfectant</b>				on request: <a href="mailto:info@drrr.de">info@drrr.de</a>
2251013	<b>Disinfectant bactericidal activity (EN 13727, EN 1276)</b>	<input type="checkbox"/> bactericidal effect S.aureus conc. 1 [log10 cfu/ml], bactericidal effect S.aureus conc. 2 [log10 cfu/ml], bactericidal effect S.aureus conc. 3 [log10 cfu/ml], bactericidal effect Ps.aeruginosa conc. 1 [log10 cfu/ml], bactericidal effect Ps.aeruginosa conc. 2 [log10 cfu/ml], bactericidal effect Ps.aeruginosa conc. 3 [log10 cfu/ml]		
2251014	<b>Disinfectant levurocidal activity (EN 13624, EN 1650)</b>	<input type="checkbox"/> Levurocidal effect C.albicans conc. 1 [log10 cfu/ml], Levurocidal effect C.albicans conc. 2 [log10 cfu/ml], Levurocidal effect C.albicans conc. 3 [log10 cfu/ml]		
2251015	<b>Disinfectant mycobactericidal activity (EN 14348)</b>	<input type="checkbox"/> mycobactericidal effect M.terrae conc. 1 [log10 cfu/ml], mycobactericidal effect M.terrae conc. 2 [log10 cfu/ml], mycobactericidal effect M.terrae conc. 3 [log10 cfu/ml]		
2251016	<b>Disinfectant sporocidal activity (EN 17126)</b>	<input type="checkbox"/> sporocidal activity B.subtilis [log10 pfu/ml], sporocidal activity B.cereus [log10 pfu/ml]		
2251017	<b>Disinfectant virucidal activity (EN 14476)</b>	<input type="checkbox"/> virucidal effect (Vacciniavirus) conc. 1 [log10 pfu/ml]		

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