Certificate of Reference Materials

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien

boiled sausage (chasseur sausage)
RM CP L FP BW1 13

ref. 27.02.2026

Art. No. 1121031-019

reference values

parameter	reference value	uncertainty	unit
total fat	**12,27**	± 0,16	g/100 g
moisture content	**65,47**	± 0,15	g/100 g
ash	**2,74**	± 0,02	g/100 g
crude protein (N x 6,25)	**15,66**	± 0,14	g/100 g
hydroxyproline	**0,169**	± 0,006	g/100 g
sodium chloride	**1,83**	± 0,02	g/100 g
sodium nitrate	**26,7**	± 2,3	mg/kg
sodium nitrite	**15,1**	± 2,4	mg/kg
diphosphorus pentoxide (P2O5)	**0,466**	± 0,008	g/100 g
calcium (Ca) *	**70,0**	± 4,2	mg/kg

The reference values are established on the basis of the corresponding statistical data and reported as rounded data. For the uncertainty of the reference value the uncertainty of the best estimate of the true value out of the proficiency testing will be chosen.

statistical data

parameter	weighted and combined standard deviation / MAD of the best estimate	total uncertainty of the best estimate (95,5%)	method of choice	number of values	number of proficiency testing schemes
total fat	± 0,36	± 0,16	Weibull-Stoldt (acid hydrolysis) / § 64 LFGB L 06.00-6 / ISO 1443	21	1
moisture content	± 0,41	± 0,15	ISO 1442 / 103°C+/-2°C / § 64 LFGB L 06.00-3	30	1
ash	± 0,05	± 0,02	ISO 936 / 550 ± 25 °C / § 64 LFGB L 06.00-4	33	1
crude protein (N x 6,25)	± 0,37	± 0,14	Kjeldahl / § 64 LFGB L 06.00-7 / ISO 937	31	1
hydroxyproline	± 0,016	± 0,006	ISO 3496 / photometric / § 64 LFGB L 06.00-8	32	1
sodium chloride	± 0,03	± 0,02	potentiometric (chloride) / § 64 LFGB L 07.00-5/1	15	1
sodium nitrate	± 4,8	± 2,3	IC / photometric / HPLC / EN 12014-4	19	1
sodium nitrite	± 5,9	± 2,4	IC / ISO 2918 / photometric / HPLC / EN 12014-3 / EN 12014-4	26	1
diphosphorus pentoxide (P2O5)	± 0,018	± 0,008	photometric / ISO 23776 (photometric) / § 64 LFGB L 06.00-9	20	1
calcium (Ca) *	± 7,3	± 4,2	AAS / ICP-MS / ICP-OES	14	1

For the calculation of the reference values 3 different statistical methods were used: sensitive statistic, sensitive statistic including outlier elimination and robust statistic. Each of the statistical methods were rated according the chi2-goodness of fit test. A chi2-value smaller than 7,82 reflects a high confidence in the applied statistics.

The uncertainty indicates the limits of reliability of the mean at 95,5 % statistical significance.

The traceability is based on the method/s of choice if available the reference method. Therefore only the results of those participants which use the method/s of choice or where available the reference method are considered for the best estimate.

* the value for this parameter is no reference value, but a orientation value

Deutsches Referenzbüro für Ringversuche und Referenzmaterialien GmbH
Sitz der Gesellschaft: Kempten
Handelsregister HRB 9496
Amtsgericht Kempten

Fon: +49 (0)8 31/960 878-0
Fax: +49 (0)8 31/960 878-99
E-Mail: info@DRRR.de
Website: www.DRRR.de
Reinhartser Straße 31 D-87437 Kempten

Sitz der Gesellschaft: Kempten
Handelsregister HRB 9496
Amtsgericht Kempten
Geschäftsführer: Dr. rer. nat. Ulrich Leist,
Thorsten Helbig M.Eng.

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general information

SAMPLES ARE UNFIT FOR CONSUMPTION!

produced: 01/2025

sample quantity: 200,0 g

packaging: plastic foil (1 unit(s))

The material has to be used within: **07/2026**

(Storage sealed at -18 °C)

The material is checked regularly by DRRR.

Please bring the reference material to room temperature directly before usage. Please remove the skin of the sausage before the homogenization. Please homogenize the material carefully before the testing. The reference value for sodium chloride was determined over the chloride content.

The contents may change in the opened package or due to incorrect storage. The material is suitable to be used for regular performance control in chemical analysis of boiled sausage (chasseur sausage) and to control the reference analytic. It is also especially with regard to accuracy, as well as for validation of a laboratories' own method.

A guarantee of the reference values and their uncertainties is only given under the precondition that the material is unopened, stored and used as described above.

After sample opening the testing has to be carried out immediately. The reference values are only guaranteed until first sample opening

homogeneity

A homogeneity test was carried out at 7 representative random samples in double determination acc. to ISO 13528 (Intern. Harmonised Protocol).

Certificate approved: Moritz Hebestreit