

Annex 8.2 Table of Limit-/QS Guidance Values

The maximum level, action thresholds as well as the QS guidance values always relate to 88 % of dry matter (exception: original substance used for pesticide residues). Results near the limit/guidance value (minimum exhaustion rate of 75 %) should therefore always be converted to 88 % of dry matter (TS). If the dry matter content falls below 84 %, drying and conversion to 88 % dry matter must take place.

Within the QS database the lab has to specify whether the measured value refers to 88 % dry matter (TS), the original substance (OS) or the fat content of the analysed feed.

Where no QS guidance values are available, the legal maximum levels or action threshold or EU assessment values apply.

In addition to the determined value, the labs are obliged to enter the respective legal maximum levels, QS guidance values and analysis range in the data record if these have not already been pre-assigned in the database.

Parameter	QS guidance value	Maximum level	Source ³
Aflatoxin B1	0.001 mg/kg for compound feed and feed materials intended for QM-Milk dairy farms. For all others the legal maximum level applies.	Legal maximum level	QS respectively Directive 2002/32/EG (valid version of annex respectively)
Zearalenone (ZEA)	For sugar beet pulp ¹ to: <ul style="list-style-type: none"> ■ Sows, fattening pigs: 0.25 mg/kg ■ Piglets: 0.1 mg/kg ■ Calves, dairy cattle: 0.5 mg/kg 	EU assessment values	QS respectively Commission recommendation (2006/576/EG) from 17.08.2006
Deoxynivalenol/Vomitoxin (DON)	For sugar beet pulp ¹ to: <ul style="list-style-type: none"> ■ Sows, fattening pigs, piglets: 1 mg/kg ■ Fattening cattle: 5 mg/kg ■ Calves: 2 mg/kg ■ Dairy cattle: 3 mg/kg ■ Poultry: 4 mg/kg 	EU assessment values	QS respectively Commission recommendation (2006/576/EG) from 17.08.2006
Ochratoxin A (OTA)	-	EU assessment values	Commission recommendation (2006/576/EG) from 17.08.2006
Dioxin	-	Legal maximum level and action threshold	Directive 2002/32/EG (valid version of annex respectively)
PCB (Dioxin-like)	-	Legal maximum level	Directive 2002/32/EG (valid version of annex respectively)

Parameter	QS guidance value	Maximum level	Source ³
Non-dioxin-like PCB	-	Legal maximum level	Directive 2002/32/EG (valid version of annex respectively)
Summation of Dioxin and Dioxin-like PCB	-	Legal maximum level	Directive 2002/32/EG (valid version of annex respectively)
Salmonella	Negative (in the case of a positive result: identification of the serotype with details of the subspecies and serovar)	-	QS respectively Regulation (EG) 2160/2003
Cadmium	-	Legal maximum level	Directive 2002/32/EG (valid version of annex respectively)
Lead	-	Legal maximum level	Directive 2002/32/EG (valid version of annex respectively)
Arsenic	-	Legal maximum level	Directive 2002/32/EG (valid version of annex respectively)
Mercury	-	Legal maximum level	Directive 2002/32/EG (valid version of annex respectively)
Nickel	Maximum level: 50 mg/kg (on fat base) Action threshold: 20 mg/kg (on fat base)	-	QS
Animal components	Negative (in the case of a positive result: identification if noncritical)	-	QS respectively Regulation (EC) No. 999/2001 in the valid version respectively
Pesticides (including chlormequat, dithiocarbamate, glyphosate)	-	Legal maximum level	The statutory limits of EU Regulation 396/2005 are valid. When available, the processing factors by the BfR can be used
Organochlorine compounds (except dioxins and PCBs)	-	Legal maximum level	Directive 2002/32/EG (valid version of annex respectively)
PAH (Polycyclic aromatic hydrocarbons)	Sum of PAK4 for: Oils and fats (excluding palm(kernel)-, coconut oil and products derived thereof): Action threshold: 160 µg/kg (on fat basis) Guidance value: 200 µg/kg (on fat basis)	-	GMP+ Int. (document: GMP+ D4.14 and GMP+ D4.15; PAK4 = sum of benzo(a)pyren, benz(a)anthracen, benzo(b)fluoranthen and chrysen)

Parameter	QS guidance value	Maximum level	Source ³
	Palm(kernel)-, coconut oil and products derived thereof: Action threshold: 320 µg/kg (on fat basis) Guidance value: 400 µg/kg (on fat basis): Benzo(a)pyren (BaP) for: Products with fat content < 10%: Guidance value: 25 µg/kg		
Antibiotic active substances	Quantitative analysis for substances named in footnote 2 using LC MS/MS ²	Legal maximum level	QS respectively Directive 2002/32/EG (valid version of annex respectively), Regulation (EC) No. 1831/2003
Methanol	2 g/kg	-	QS
Packaging material	Maximum level: 0.20 % Action threshold: 0.15 % (particle size > 0.5 mm)	-	Statement No. 034/2005 of BfR from 25 May 2005
Ergot (claviceps purpurea)⁴	-	Legal maximum level	Directive 2002/32/EG (valid version of annex respectively)
Hydrocyanic acid (HCN)	-	Legal maximum level	Directive 2002/32/EG (valid version of annex respectively)

¹ Positions **Annex 9.5 QS-list of feed materials**: 04.01.07 to 04.01.11 as well as 04.01.13 and 04.01.17

² The following antibiotics and coccidiostats must be examined by LC MS/MS and their content determined.

Stage Feed sector:

Amoxicillin, chlortetracycline, doxycycline, florfenicol, lasalocid A sodium, lincomycin, maduramicin ammonium alpha, monensin sodium, narasin, nicarbazine, oxytetracycline, salinomycin sodium, spiramycin, sulfadiazin, sulfadimethoxine, sulfadimidin, sulfamethoxazole, tetracycline, tiamulin, trimethoprim, tylosin, virginiamycin M1.

Fish products (Position Positive list: 10.01.01 to 10.05.01., except 10.02.03 und 10.02.04 from aquacultures (products from third party country)): Chloramphenicol, furaltadone, furazolidone, leucomalachit green, malachit green, nitrofurantoin.

Stage Agricultural sector:

Self mixtures for poultry: Amoxicillin, benzylpenicillin, colistin, doxycycline, enrofloxacin, lincomycin, sulfadiazin, sulfadimethoxine, sulfadimidin, sulfamethoxazole, tiamulin, trimethoprim, tylosin.

Self mixtures for for pigs and cattle: Amoxicillin, benzylpenicillin, cefquinome, ceftiofur, chlortetracycline, colistin, doxycycline, enrofloxacin, florfenicol, lincomycin, marbofloxacin, oxytetracycline, sulfadiazin, sulfadimethoxine, sulfadimidin, sulfamethoxazole, tetracycline, tiamulin, tildipirosin, tilmicosin, trimethoprim, tulathromycin, tylosin.

³ In case that a directive or EU regulation is mentioned as source, this or the resale right applies.

⁴ Examinations (optical controls) on ergot (claviceps purpurea) are to be conducted and documented by the company itself as an incoming goods inspection in unground grain. If ergot is found, subsequent count and documentation take place (no entry in QS database).



Qualitätssicherung. Vom Landwirt bis zur Ladentheke.



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Criteria/Requirement	Changes	Date of change
Entry into the QS-database	Clarification: Laboratories are obliged to enter the analysis range in the QS database.	01.01.2021
Aflatoxin B1	Clarification: The QS guidance values for Aflatoxin B1 applies to compound feed and feed materials intended for use in QM-Milk dairy farms.	01.01.2021
Zearalenone (ZEA) & Deoxynivalenol/Vomitoxin (DON)	Change Footnote 1: The QS guidance values apply to sugar beet pulp according to the positions in the Annex 9.5 QS-list of feed materials.	01.01.2021
Methanol	Cancellation of the Positive List for Straight Feedingstuffs as source for the guidance value.	01.01.2021
PAH (Polycyclic aromatic hydrocarbons)	Clarification: The guidance values and thresholds for oils and fats applies to the sum of PAK4. For products with a fat content <10 %, a guidance value for benzo(a)pyren applies.	01.01.2021