

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 ²
Aflatoxin B1	For compound feed and feed materials intended for feeding dairy cows in QM-Milk dairy farms. <ul style="list-style-type: none"> QM-Milk action threshold: 0.001 mg/kg QM-Milk maximum level: 0.0025 mg/kg For all others the legal maximum level applies.	Legal maximum level	Feed agreement on the use of purchased feed in milk production (QM-Milch e.V.) 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 guidance 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 guidance values	QS respectively Commission recommendation (2006/576/EG) from 17.08.2006

Parameter	QS guidance value	Maximum level	Source ²
Ochratoxin A (OTA)	-	EU guidance values	Commission recommendation (2006/576/EG) from 17.08.2006
Fumonisin B1/B2	-	EU guidance values	Commission recommendation (2006/576/EG) from 17.08.2006
T2/HT2-Toxins	-	EU guidance values	Commission recommendation (2013/165/EU) from 27.03.2013
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)
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)

Parameter	QS guidance value	Maximum level	Source ²
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	<ul style="list-style-type: none"> 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 PAH4 for: <ul style="list-style-type: none"> Oils and fats (excluding palm(kernel)-, coconut oil and products derived thereof): <ul style="list-style-type: none"> Action threshold: 160 µg/kg (on fat basis) Guidance value: 200 µg/kg (on fat basis) 	-	QS PAH4 = sum of benzo(a)pyrene, benz(a)anthracene, benzo(b)fluoranthene and chrysene PAH 8 = sum of benzo(a)pyrene, dibenzo(a,h)anthracene,

Parameter	QS guidance value	Maximum level	Source ²
	<ul style="list-style-type: none"> Palm(kernel)-, coconut oil and products derived thereof: <ul style="list-style-type: none"> Action threshold: 320 µg/kg (on fat basis) Guidance value: 400 µg/kg (on fat basis) Products with fat content < 10%: 50 µg/kg (guidance value) <p>Sum of PAHs for vegetal carbon (charcoal): 1 mg/kg</p>		benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, indeno(1,2,3,c,d)pyrene and benzo(g,h,i)perylene
Antibiotic active substances	Quantitative analysis for substances named in annex 8.8 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	<ul style="list-style-type: none"> 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)³	-	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)
Insoluble impurities		Legal maximum level	Regulation (EU) Nr. 142/2011

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

³ 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).

Revision information Version 01.01.2024rev01 (Status: 01.07.2024)

Criteria/requirement	Changes	Date of change
Aflatoxin B1	<p>Cancellation: The QS guidance value for compound feed and feed materials intended for feeding to dairy cows in QM-Milk dairy farms has been cancelled.</p> <p>New: New QM- Milk action threshold and QM-Milk maximum level for compound and feed materials intended for feeding to dairy cows in QM-Milk dairy farms.</p> <p>New: The feed agreement on the use of purchased feed in milk production (QM-Milch e.V.) has been included as source for the QM-Milk action threshold and QM-Milk maximum level for compound feed and feed materials intended for feeding to dairy cows on QM- Milk dairy farms.</p>	01.07.2024
PAH (Polycyclic aromatic hydrocarbons)	<p>Cancellation: The guidance value for benzo(a)pyrene in products with a fat content <10 % has been deleted.</p> <p>New: New guidance value for sum of PAH4 in products with fat content <10 %.</p> <p>New: New guidance value for sum of PAH8 in vegetal carbon (charcoal).</p>	01.01.2024