

## 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 <sup>2</sup>
<b>Aflatoxin B1</b>	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 <b>Directive 2002/32/EG</b> (valid version of annex respectively)
<b>Zearalenone (ZEA)</b>	For sugar beet pulp <sup>1</sup> to: <ul style="list-style-type: none"> <li>Sows, fattening pigs: 0.25 mg/kg</li> <li>Piglets: 0.1 mg/kg</li> <li>Calves, dairy cattle: 0.5 mg/kg</li> </ul>	EU assessment values	QS respectively <b>Commission recommendation (2006/576/EG)</b> from 17.08.2006
<b>Deoxynivalenol/Vomitoxin (DON)</b>	For sugar beet pulp <sup>1</sup> to: <ul style="list-style-type: none"> <li>Sows, fattening pigs, piglets: 1 mg/kg</li> <li>Fattening cattle: 5 mg/kg</li> <li>Calves: 2 mg/kg</li> <li>Dairy cattle: 3 mg/kg</li> <li>Poultry: 4 mg/kg</li> </ul>	EU assessment values	QS respectively <b>Commission recommendation (2006/576/EG)</b> from 17.08.2006
<b>Ochratoxin A (OTA)</b>	-	EU assessment values	<b>Commission recommendation (2006/576/EG)</b> from 17.08.2006

Parameter	QS guidance value	Maximum level	Source <sup>2</sup>
<b>Fumonisin B1/B2</b>	-	EU assessment values	<b>Commission recommendation (2006/576/EG)</b> from 17.08.2006
<b>T2/HT2-Toxins</b>	-	EU assessment values	<b>Commission recommendation (2013/165/EU)</b> from 27.03.2013
<b>Dioxin</b>	-	Legal maximum level and action threshold	<b>Directive 2002/32/EG</b> (valid version of annex respectively)
<b>PCB (Dioxin-like)</b>	-	Legal maximum level	<b>Directive 2002/32/EG</b> (valid version of annex respectively)
<b>Non-dioxin-like PCB</b>	-	Legal maximum level	<b>Directive 2002/32/EG</b> (valid version of annex respectively)
<b>Summation of Dioxin and Dioxin-like PCB</b>	-	Legal maximum level	<b>Directive 2002/32/EG</b> (valid version of annex respectively)
<b>Salmonella</b>	Negative (in the case of a positive result: identification of the serotype with details of the subspecies and serovar)	-	QS respectively <b>Regulation (EG) 2160/2003</b>
<b>Cadmium</b>	-	Legal maximum level	<b>Directive 2002/32/EG</b> (valid version of annex respectively)
<b>Lead</b>	-	Legal maximum level	<b>Directive 2002/32/EG</b> (valid version of annex respectively)

Parameter	QS guidance value	Maximum level	Source <sup>2</sup>
<b>Arsenic</b>	-	Legal maximum level	<b>Directive 2002/32/EG</b> (valid version of annex respectively)
<b>Mercury</b>	-	Legal maximum level	<b>Directive 2002/32/EG</b> (valid version of annex respectively)
<b>Nickel</b>	Maximum level: 50 mg/kg (on fat base) Action threshold: 20 mg/kg (on fat base)	-	QS
<b>Animal components</b>	Negative (in the case of a positive result: identification if noncritical)	-	QS respectively <b>Regulation (EC) No. 999/2001</b> in the valid version respectively
<b>Pesticides (including chlormequat, dithiocarbamate, glyphosate)</b>	-	Legal maximum level	The statutory limits of <b>EU Regulation 396/2005</b> are valid. When available, the processing factors by the BfR can be used
<b>Organochlorine compounds (except dioxins and PCBs)</b>	-	Legal maximum level	<b>Directive 2002/32/EG</b> (valid version of annex respectively)
<b>PAH (Polycyclic aromatic hydrocarbons)</b>	Sum of <b>PAH4</b> for: <ul style="list-style-type: none"> <li>Oils and fats (excluding palm(kernel)-, coconut oil and products derived thereof): <ul style="list-style-type: none"> <li>Action threshold: 160 µg/kg (on fat basis)</li> <li>Guidance value: 200 µg/kg (on fat basis)</li> </ul> </li> <li>Palm(kernel)-, coconut oil and products derived thereof: <ul style="list-style-type: none"> <li>Action threshold: 320 µg/kg (on fat basis)</li> </ul> </li> </ul>	-	QS <b>PAH4</b> = sum of benzo(a)pyrene, benz(a)anthracene, benzo(b)fluoranthene and chrysene <b>PAH 8</b> = sum of benzo(a)pyrene, dibenzo(a,h)anthracene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene,

Parameter	QS guidance value	Maximum level	Source <sup>2</sup>
	<ul style="list-style-type: none"> <li>- Guidance value: 400 µg/kg (on fat basis)</li> <li>• Products with fat content &lt; 10%: 25 µg/kg (guidance value)</li> </ul> <p>Sum of <b>PAHS</b> for vegetal carbon (charcoal): 1 mg/kg</p>		indeno(1,2,3,c,d)pyrene and benzo(g,h,i)perylene
<b>Antibiotic active substances</b>	Quantitative analysis for substances named in annex 8.8 using LC MS/MS <sup>2</sup>	Legal maximum level	QS respectively <b>Directive 2002/32/EG</b> (valid version of annex respectively), <b>Regulation (EC) No. 1831/2003</b>
<b>Methanol</b>	2 g/kg	-	QS
<b>Packaging material</b>	Maximum level: 0.20 % Action threshold: 0.15 % (particle size > 0.5 mm)	-	Statement No. 034/2005 of BfR from 25 May 2005
<b>Ergot (claviceps purpurea)<sup>3</sup></b>	-	Legal maximum level	<b>Directive 2002/32/EG</b> (valid version of annex respectively)
<b>Hydrocyanic acid (HCN)</b>	-	Legal maximum level	<b>Directive 2002/32/EG</b> (valid version of annex respectively)
<b>Insoluble impurities</b>		Legal maximum level	<b>Regulation (EU) Nr. 142/2011</b>

<sup>1</sup> 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

<sup>2</sup> In case that a directive or EU regulation is mentioned as source, this or the resale right applies.

<sup>3</sup> 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 01.01.2024

Criteria/requirement	Changes	Date of change
PAH (Polycyclic aromatic hydrocarbons)	<p><b>Cancellation:</b> The guidance value for benzo(a)pyrene in products with a fat content &lt;10 % has been deleted.</p> <p><b>New:</b> New guidance value for sum of PAH4 in products with fat content &lt;10 %.</p> <p><b>New:</b> New guidance value for sum of PAH8 in vegetal carbon (charcoal).</p>	01.01.2024