GMP+ International

FAQ Feed Support Products

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GMP+ Feed Certification scheme

Feed Safety Worldwide

gmpplus.org

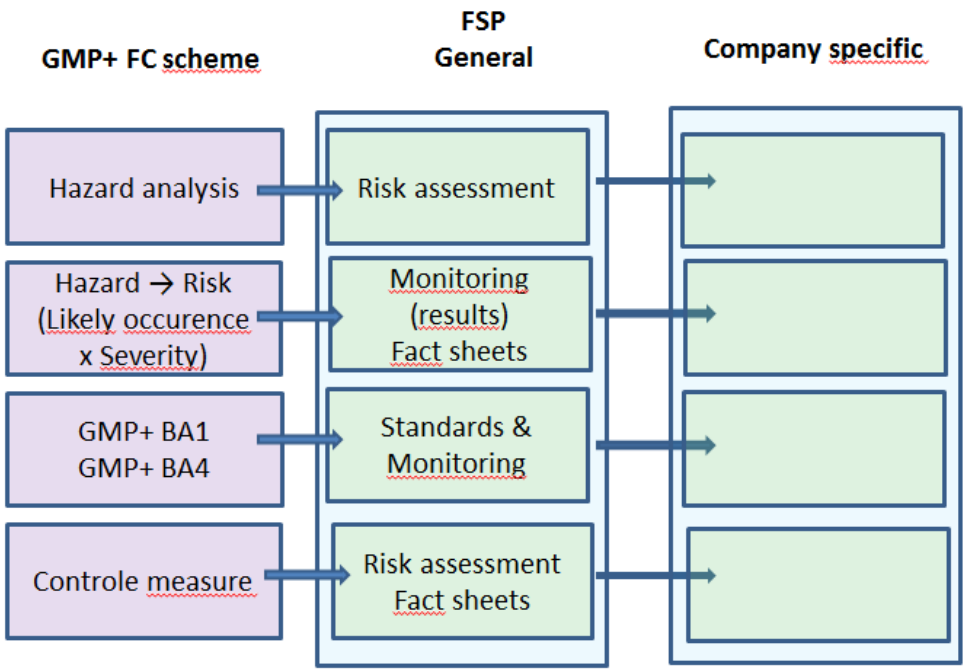
INDEX

1 What is the purpose of the FSP?

The Feed Support Products (FSP) is an interactive database which is part of the GMP+ FC Scheme. The FSP comprises various parts of the GMP+ FC scheme: risk assessments, monitoring results, specific feed safety limits and fact sheets. The approved feed materials in the FSP are quality assured here.

The Feed Support Products is intended to support all (future) GMP+ companies when setting up their company-specific HACCP system. The Feed Support Products is a tool which the companies can use to make easier the setting up and implementation of their company-specific HACCP system. The responsibility for use and implementation remains with the GMP+ certified companies, the Feed Support Products can offer support in this process.

The following diagram shows which GMP+ products in the Feed Support Products can offer support for which part of the company-specific HACCP analysis.



2 Risk assessments

2.1 What is the purpose of including a risk assessment in the FSP?

The following are the four objectives of including a risk assessment in the FSP:

a) which feed materials are considered to be controllable and can therefore be safely used in the feed sector;
b) An aid to GMP+ companies in the drawing up of their company-specific risk assessments.
c) the feed sector makes clear to interested parties how the production processes are assessed.
d) The risk assessments serve as a reference for the auditors within the framework of GMP+ certification.

2.2 Which products can be included in the FSP?

The FSP is currently intended for all feed materials which are fed to food-producing animals.

2.2.1 Feed materials?

Use can be made of the 'Feed Materials Decision Tree' as an aid when categorizing a product. The decision tree uses the answers to a number of questions to categorize the product in question.

2.2.2 Target animals?

With the arrival of the new trade regulation EC/767/2009 there is a new definition for productive livestock, namely food-producing animals. FSP will use this definition. The definition is as follows:

> *"Any animal which is fed, bred or kept for the production of food for human consumption, including animals that are not used for human consumption, but that belong to a species that is normally used for consumption in the Community."*

Food-producing animals include, in addition to the usual productive livestock such as goats, poultry, cattle, sheep and pigs, also horses and rabbits.

(Farmed) fish can also be considered a food producing animal. (Farmed) fish fell outside of the scope of the FPS, because (farmed) fish were not included in the assessment of the severity of the hazards in the risk assessments. The reason for this is that (farmed) fish are much more sensitive to contaminants than other animal species. Currently, GMP+ International is working on updating the existing Fact sheets of undesirable substances. In this update of the fact sheets, (farmed) fish will also be addressed. In doing so, the severity of a hazard for this animal species will be determined as well.

Feed materials for pets do not, by the way, have to be included in the FSP. This is not a requirement of the GMP+ FC scheme.

2.3 Is it mandatory to include a feed material in the FSP?

The obligation applies to all standards with the scope production / trade of feeds for food-producing animals. The standard contains the following requirements:

> For each type of feed material to be purchased or received, there should be a generic risk assessment in the Feed Support Products (FSP).
>
> *If it is a feed material for which there is no risk assessment in the Feed Support Products of GMP+ International, then the participant should first offer a risk assessment to the GMP+ International for inclusion in the database referred to. Only after inclusion in the database may the feed material be sold or received.*

2.4 Is the information in a risk assessment binding?

The risk analyses in the database are of a generic nature and represent a worst-case scenario. The risk analyses can serve as a guideline for the company-specific assessment.

The **hazards** which are specified in the analysis do not self-evidently have to be applicable in the company-specific analysis as the generic risk analysis represents a worst case scenario.

Also, when estimating the **likely occurance** the situation is assumed where no control measures have been taken yet. The likely occurence estimation is a guideline. Each individual GMP+ company should determine and enter the likely occurence itself.

The estimation of the **severity** is the same for all the hazards in all the risk assessments. It is a characteristic of the substance (for example a chemical contaminant) or the product (bacteria, glass, etc.).

2.5 What are the sections of a risk assessment?

Each risk assessment consists of four parts:

1. Data sheet
2. A global flow chart
3. A detailed flow chart
4. The risk analysis

An explanation of the various sections is to be found in Annex 1.

2.6 Estimation of the Severity

The estimation of the severity is the same for all the hazards in all the risk assessments. It is a characteristic of the substance (for example a chemical contaminant) or the product (bacteria, glass, etc.).

The severity is determined by both the effect on the animal and the effect on humans. The effect on all food-producing animals is included as it is not known or which type of animal a raw material will be used. The degree of severity is determined by the most sensitive species and the sum of the severity (effect on humans and animals) is determined by the greatest effect on humans and animals.

The degree of severity is determined on the basis of scientific data. This data is laid down in fact sheets. Please refer to the Fact Sheets button in the database. For further information see also further on in the FAQ list.

2.7 Estimation of the Likely occurence

The likely occurence estimation is worst case which means that in this situation no control measures have been taken yet. And the likely occurence estimation is generic and a guideline.
Each individual GMP+ company should determine and enter the likely occurence itself.

2.8 What has changed compared to the old risk assessments?

The structure of the current risk assessments is in accordance with the most recent HACCP system as described n the HACCP manual 2008. Compared to the old risk assessments, this mean that no information is now included about the risk classes (1,2,3 and 4) and the conclusion POA/CCP.
The control measures (and the associated hazards) as specified in the GMP+ prerequisites program will also no longer be part of risk assessment. This means there is more attention for product-specific hazards.

2.9 Why are names of producers still listed next to the mineral feed materials?

In a number of mineral feed materials, the name of the producer is listed next to the product name. No generic risk assessments have been drawn up yet for these mineral feed materials. The producers have provided company specific risk profiles. Due to sensitive corporate information, these are not published. At this point, it is only possible to purchase mineral feed materials originating from producers listed next to the relevant mineral feed material.

Are you a producer of a mineral feed listed with a producer name, and would you also like to sell this feed material into the GMP+ chain, you can send GMP+ International a risk assessment of the relevant mineral feed material. GMP+ International will, based on all available information, draw up a generic risk assessment for approval, after which inclusion in the FPS will take place.

2.10 Why are herbs on the FSP Product list as product group instead of all individual herbs?

Herbs are indeed on the FSP Product list as product group instead of individual products per herb specifies. The reason for this is that it concerns a large group of products. The main principle is that the production of the herb is largely in accordance with the information of the Risk Assessment 'Herbs, dried and ground'. It concerns tried plants and / or dried parts thereof, whether or not ground. In the Risk Assessment, the cultivation, extraction and processing of herbs is described in general. The possible hazards are identified in the Risk Assessment as well. However, the company must assess the realistic potential hazards / risks of the individual herbs.

Please Note: The natural extracts, tinctures and oils of herbs must be considered feed additives.

3 Fact Sheets

3.1 What are fact sheets?

Fact Sheets are information sheets with background information. There are fact sheets for undesirable substances and processing aids.
The undesirable substances are designated as hazards in the risk assessments. The fact sheets provide information about the hazard and the (substantiation of the) severity for animals and humans. The information in the fact sheets new style originate from scientific sources, such as the EFSA, WHO, etc. For more information about the structure and contents of the fact sheets, please see the reading guide below the Fact sheets button.

There is no complete fact sheet yet for every hazard with the section More Facts. These will be supplemented in the coming period.

3.2 Which fact sheets are available in FSP?

Fact sheets are available with regard to undesirable substances and technical auxiliary substances which are used in the production of feed materials.

A new style fact sheet is available for the following **undesirable substances**:

Mycotoxin

1. Aflatoxin
2. Don
3. Fumonisin B1 and B2
4. Ergot of rye
5. Orchratoxin
6. Zealarenon
7. T-2 and HT-2 toxins

Crop protection agents (Pesticides which are not permitted in the EU)

8. Camphechloor
9. Chlordane
10. DDT
11. Endosulfan
12. Endrin
13. Heptachlor
14. Hexachlorobenzene (HCB)
15. Hexachlorecyclohexane (HCH)

Toxic substances

16. Dioxins, Furans and Dioxin like PCB's
17. Hydrocarbons (C10-C40))
18. Nox and DMNA
19. Polycyclic Aromatic Hydrocarbons (PAH4)

Heavy Metals

20. Arsenic
21. Cadmium
22. Fluorine
23. Mercury
24. Lead
25. Nickel

Antinutritional factors / Botanical impurities

26. Ricinus-Ricinus commuc L.
27. Datura Stramonium L.
28. pyrrolizidine alkaloids
29. Theobromine
30. Vinylthiooxazolidon/various mustard seeds
31. Free gossypol

Microbiological contamination

32. Salmonella
33. Clostridia
34. Campylobacter
35. Moulds and yeasts

Others

36. Antibacterial inhibition/antibiotics
37. Biogenic Amines
38. Hydrocyanic acid
39. Animal Protein
40. Melamin
41. Radioactivity
42. Nitrate and nitrite

Fact sheets are available for the following groups **of technical auxiliary substances**:

1. Organic solvents
2. Mineral salts
3. Inorganic acids
4. Hydroxides
5. Coagulants and flocculants
6. Catalysts
7. Anti foaming agents

The use of processing aids is allowed in GMP+ if it is demonstrated on the basis of a risk analysis that the unintended, but technically unavoidable presence of residues of these technical auxiliary substances or their derivatives in the end product do not have adverse consequences for the health of humans or animals or for the environment and do not have any technological effect on the end product.

For the above groups of processing aids the FSP includes fact sheets with information about the group of processing aids concerned which can be used by the GMP+ certified companies as input for the realization of the above-mentioned risk analyses.

4 Standards

For every hazard, the HACCP team of the GMP+ company establishes an acceptable level of presence in the feed, in which the limits documented in the GMP+ FSA module are met at the least. These limits are available in Appendix 1 of the GMP+ Feed Certification Scheme (GMP+ BA1 "*Specific Feed Safety Limits"*).

Click here to download GMP+ BA1 *Specific Feed Safety Limits*.

Annex 1: Explanation of the sections of a risk assessment

1. Data sheet

The data sheet contains the following:

a. List of products stating the products which are included in the risk analysis in question plus a definition of the product.
b. List of processing aids used in the treatment and processing step.

Explanation:

Re. a. The (product) definitions match as far as possible the definitions used within the EU, Regulation EC (no) 767/2009 "Catalogue of feed materials"). If no EU definition is available, then the German Positiv Liste is consulted.

Re.b. The use of processing aids is permitted in GMP+ if it is demonstrated on the basis of a hazards analysis that the unintentional but technically unavoidable presence of residues of these processing aids or their derivatives in the end product has no detrimental effects on animal health, human health or the environment and no technological effect at all on the end product.
Fact sheets have been included for the following groups of processing aids in the FSP with information about the group of processing aids in question which can serve as input for the GMP+ certified companies when carrying out the hazards analysis referred to earlier. These include the following processing aids:

- *Organic solvents*
- *Mineral salts*
- *Inorganic acids*
- *Hydroxides*
- *Coagulants and flocculants*
- *Catalysts*
- *Anti-foaming agents*

2 Flow chart

2.1 Layout

A flow chart can be divided up into a main process and sub-processes. The drawing up of a main process can be useful if the process is complicated because of many process steps and/or if there are many input and output flows. The following main process steps are identified in a risk assessment:

1. Cultivation
2. Harvesting / preservation (at the farm)
3. Transport / storage
4. Treatment / processing

Each main process is then worked out in a more detailed subprocess where all the process steps are shown separately.

2.2 Use of color

Colors are used to clarify the input and output of a process. The colors have the following meanings:

Color	***Meaning***
black (color code 23)	*Feed material. These products & the definition are specified in the data sheet.*
dark grey (color code 17)	*Interim product which is not sold (directly) as a feed. The product is then processed or treated.*
light grey (color code 15):	*Input: processing aids and/or feed additives* *Output: these products are sold outside the feed sector.*

3 The (generic) risk analysis

The hazards in each production phase are summarized in the risk analysis. An estimate is then made of the likely occurrence that a hazard may occur and of the consequences (severity) involved. Where necessary suggestions are made for the control measures to be taken.

The new structure of the risk analysis contains the following sections:

Process step

Each risk assessment contains a representation of the flow chart for a product.

The following main process steps are distinguished:

1. Cultivation / receipt / raw material harvest
2. harvesting and preservation at the farm
3. transport
4. storage
5. treatment / processing

The main stages are linked by numbers to the sub processes as specified in the sub process diagram

Hazard

A hazard can be described as a contaminant in a feed material or a situation which can lead to it and which has adverse consequences for the health of humans and animals.

The potential hazards which may make animal nutrition or feed unsafe for consumption by humans or animals should be listed for each process step where account should be taken of:

1. Hazards from the raw materials (basic materials) and auxiliary agents (additives which are added during the process)
2. Hazards from the process steps (see the flow chart, 2.1)

Category

Hazards can be subdivided into three categories, physical, chemical and microbiological hazards.

Risk estimation

The risk estimation comprises the two elements Likely occurrence X Severity. The following applies:

Severity

Severity is the consequence for the health of the target animal and also the consequential damage to humans when products of animal origin are consumed. The severity should be based on literature, practical experience and/or experimental data, etc., and is classified into three levels: small, moderate and great. (Source: HACCP manual 2008)

Likely occurrence

The likely occurrence is the probability that the hazard will occur in the end product at the moment of consumption by humans and/or the target animal. The likely occurrence is based on measurements, observations or expectations in a company-specific situation and it is divided into three levels: small, moderate and great. (Source: HACCP manual 2008)

Standards

This column contains a specification of the standards which apply under EU feed legislation and/or GMP+, as specified in Appendix 1 of the GMP+ FC scheme (GMP+ BA1 *Specific Feed Safety Limits*).
If there is no standard in appendix 1 then another standard should be used. Consider the advice from EFSA.

Note:

The user is referred to the standards which apply to all types of feeds such as complete feeds, etc. This is because feed materials as such may be fed to animals but they can also be used for further processing.

Suggestion for control measure

This column makes a suggestion for a control measure. Account should be taken of the fact that:

a single hazard may be controlled by multiple control measures, and
a single control measure can control multiple hazards

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