

 Technical Specifications

MI5.4 - GMO controlled

Version EN: 1 July 2022





Index

INTRODUCTION	4
WELCOME	5
1. SCOPE OF THIS DOCUMENT	5
2. NORMATIVE REFERENCES	5
2.1. HOW TO READ THIS DOCUMENT	6
3. TERMS AND DEFINITIONS	7
4. GMO CONTROLLED	8
4.1. FEED RESPONSIBILITY MANAGEMENT SYSTEM	8
4.1.1. Determining the scope of the Feed Responsibility Management System	8
4.2. PREREQUISITE PROGRAMMES (PRPs)	8
4.2.1. People	8
4.2.2. Traceability system	8
4.3. RISK ASSESSMENT	8
4.3.1. Additional requirements for trade	9
4.3.2. Additional requirements for production	9
4.4. PURCHASE	10
4.4.1. Selection of suppliers	10
4.4.2. Verification of incoming products and/or services	12
4.4.2.1. Additional requirements for production	12
4.5. INFORMING THE CUSTOMER	13
4.5.1. Inform the customer about the status of the feed	13
4.6. VERIFICATION	14
4.6.1. External communication	14
5. SUPPLY CHAIN MODELS	15
5.1. SEGREGATION	15
6. SAMPLING AND TESTING	16
6.1. GENERAL	16
6.2. MONITORING PLAN	16
6.2.1. Feed in which genetic modification cannot be detected	16
6.2.2. Feed in which genetic modification can be detected.	16
6.2.2.1. Requirements to sample takers	17
6.2.2.2. Storage duration of samples	17
6.2.2.3. Sampling and Testing frequency	17
6.2.2.4. Sample preparation and Analysis	17
6.3. HANDLING OF POSITIVE TEST RESULTS	18



APPENDIX 1 SAMPLING AND TESTING 19
APPENDIX 2 EVALUATION OF TEST RESULTS AND MEASURES TO BE TAKEN 22



Introduction

As a result to the market demand for non-GMO feed within the European Union (EU) GMP+ International has created MI 5.4 *GMO controlled*. This in order to facilitate feed companies to comply with the demands of the market initiative VLOG.

Consumer perception plays an important role in the demand for non-GMO food (and feed). At present many (inter)national non-GMO standards are applied in the feed sector. The German VLOG standard has set a standard for the food and feed sector in parts of Europe. Therefore, GMP+ International has chosen to collaborate with VLOG to be able to facilitate the demand especially in Europe.

Legislation has been published in various countries, including Germany and France, to label products from animal origin (meat / milk / egg) as non-GMO. Such labelling also means that specific requirements are imposed on the chain upstream, including the animal feed industry. Conditions relating to the production of non-GMO food from animal origin require the use of GMO controlled feed. To provide animal feed suppliers with the opportunity to supply GMO controlled feed to farmers who deliver non-GMO end-products (meat / milk / egg) to markets where legislation allows such labelling, MI 5.4 *GMO controlled* was developed.

Regulations (EC) No. 1829/2003 and 1830/2003

The VLOG Standard is based on the GMO labelling provisions of Regulations (EC) 1829/2003 and 1830/2003. Contamination with GMOs permitted in the EU by law does not require labelling according to Regulations (EC) No. 1829/2003 and No. 1830/2003 provided that two requirements are fulfilled:

- The threshold value of the GMO content of 0.9% per feed material is not exceeded and
- The presence of the GMO content is "adventitious or technically unavoidable".

Contamination with approved GMO content < 0.1% are generally considered as technically unavoidable or adventitious. Contamination present in quantities from 0.1% to 0.9% is considered as labelling-compliant if the business has installed and demonstrably implemented organisational measures to avoid introduction of GMO material.

Verband Lebensmittel ohne Gentechnik (VLOG)

VLOG - Verband Lebensmittel ohne Gentechnik provides a non-GMO standard which includes requirements for the production of products from animal origin without the use of GMO feed ingredients. The VLOG standard supports production facilities in the implementation of the German legal requirements of non-GMO labelling and establishes uniform inspections for certification companies. It is based on the German EC Engineering Act (EG-GentDurchfG). GMP+ International worked together with Verband Lebensmittel ohne Gentechnik (VLOG) on MI 5.4 *GMO controlled*.



Welcome

This Feed Certification scheme document helps you to provide responsible feed worldwide. By meeting the requirements set by GMP+ International together with our GMP+ Community, we aim to help you get the feed certification you need. Please read the information in this document carefully.

Let's make this work together!

1. Scope of this document

The requirements to produce, store, transport and/or trade GMO controlled feed that is in compliance with the requirements as defined by VLOG are included in this document.

2. Normative references

This Market Initiative (MI) document holds the responsible feed and feed services requirements. This MI document must always be used in combination with the R 5.0 *Feed Responsibility Management Systems Requirements* which ensures the implementation of a Feed Responsibility Management System (FRMS). The combined use enables a company to provide responsible feed products and feed services in accordance to the request from the Market Initiative.

Both the R 5.0 *Feed Responsibility Management Systems Requirements* and the Market Initiative documents must be considered as a normative part of the GMP+ FRA module.

This document is to be used:

- a) in addition to the GMP+ FSA module;
- b) in combination with an equivalent feed safety standard (see TS 1.2 *Purchase*)

Storage and transshipment companies and transport companies can only use MI 5.4 *GMO controlled* and R 5.0 *Feed Responsibility Management Systems Requirements* in combination with GMP+ FSA certification for the scopes storage and transshipment and transport respectively.



2.1. How to read this document

MI 5.4 *GMO controlled* gives only additional requirements to the requirements of R 5.0 *Feed Responsibility Management Systems Requirements*. These requirements are relevant for the scope of MI 5.4 *GMO controlled*.

The structure of MI 5.4 *GMO controlled* follows the same structure as R 5.0 *Feed Responsibility Management Systems Requirements*. Only when there is an additional requirement to a certain paragraph of R 5.0 *Feed Responsibility Management Systems Requirements*, this is added in MI 5.4 *GMO controlled*. For convenience, the numbering and names of the paragraphs of MI 5.4 *GMO controlled* correspond with the relevant paragraphs in R 5.0 *Feed Responsibility Management Systems Requirements*. These additional requirements are extracted from the VLOG standard.



3. Terms and Definitions

In addition to the terms and definitions mentioned in F 0.2 *Definition list* the following terms are used:

Term	Description
At risk feed	Feed which, based on the certified company's risk assessment, has an increased risk of GMO content.
Feed exempt from mandatory labelling	Feed which, according to Regulations (EC) No. 1829/2003 or 1830/2003, is not subject mandatory labeling as genetically modified.
Feed subject to mandatory labelling	Feed which, according to Regulations (EC) No. 1829/2003 or 1830/2003, has to be labelled as genetically modified.
GMOs	Genetically modified organisms; according to Regulation (EC) No. 2001/18 these are organisms in which the genetic material has been modified by means of molecular biological methods in a way that naturally is not possible by interbreeding and/or recombination.
GMO controlled feed	Feed which is produced, stored, traded and/or transported in compliance with the requirements of GMP+ MI 5.4 <i>GMO controlled</i> .
Mobile grinding and mixing facilities	Production of feed using mobile equipment. This mobile equipment is used on the location of the livestock farmer to mix and/or grind different types of feed.
Noncompliant products	Feed which is subject to mandatory labelling according to Regulations (EC) No. 1829/2003 or 1830/2003.



4. GMO controlled

4.1. Feed Responsibility Management System

In addition to the requirements in this document, the certified company must also meet the requirements mentioned in R 5.0 *Feed Responsibility Management Systems Requirements*.

4.1.1. Determining the scope of the Feed Responsibility Management System

The certified company determines and documents which feed materials, feed additives, premixtures and/or compound feed are covered within the scope of the management system.

 **Helpful tip:**

R 5.0 Feed Responsibility Management Systems Requirements requires a supply chain model to be included in documentation. This is not applicable as segregation is the only supply chain model that can be used in MI 5.4 GMO controlled.

4.2. Prerequisite programmes (PRPs)

These requirements are in addition to R 5.0 *Feed Responsibility Management Systems Requirements*.

4.2.1. People

The certified company performs a relevant training at least once a year and in any case before the relevant employee starts with the activities which may have an impact on the GMO controlled feed.

4.2.2. Traceability system

The certified company has a written recall procedure which can be used within the framework of handling positive results and complaints.

4.3. Risk assessment

These requirements are in addition to R 5.0 *Feed Responsibility Management Systems Requirements*.



4.3.1. Additional requirements for trade

Buying feed materials from a non-certified supplier and selling this as GMO controlled feed material is only allowed in case genetic modification can be technically detected in the feed material through PCR tests. In that case the certified company must also comply with the requirements in § 4.3.2.

+ Helpful tip:

The VLOG document "Suitability of GMO Analysis for Feed, Raw Materials and Food" is available on the VLOG homepage (<https://www.ohnegentechnik.org/en/for-businesses/standards/the-vlog-standard> under "Further Documents/Instructions/Tools") to assist the feed business. This document gives an overview of feed materials in which GMOs can and cannot be tested by means of PCR tests. If GMOs are not detectable in a feed material, the feed material does not have to be tested on GMOs. In case of doubt about the absence of GMOs in a feed material, one could ask for test results by the supplier of the raw material (no requirement). This information can be used for making the risk assessment (see § 4.3.2 below).

4.3.2. Additional requirements for production

The certified company is required to make an individual, batch-specific risk assessment of risk/ not at risk feed materials, which are used within the scope of GMO controlled feed.

+ Helpful tip 1:

An "Assessment Aid – At Risk Feed" is available on the VLOG homepage (<https://www.ohnegentechnik.org/en/for-businesses/standards/the-vlog-standard> under 'Further Documents/Instructions/Tools') to assist the feed business. This document includes a table which provides an overview of where growing genetically modified plants is allowed and thus possible at-risk feed origin.

+ Helpful tip 2:

According to the VLOG standard livestock farmers are required to classify feed containing the following feed materials as "at risk": soya, corn*, rape seed and cotton. Sugar beet is to be considered as "at risk" under specific circumstances. These circumstances are explained in "Part E: Agriculture" (Chapter E § 4.2) of the VLOG Ohne Gentechnik standard, available on the VLOG homepage (<https://www.ohnegentechnik.org/en/for-businesses/standards/the-vlog-standard> (most recent version)).

**Dried corn can be considered as not 'at risk' when coming from specific regions. These specific regions are described in Part E: Agriculture (Chapter E § 4.2) of the VLOG – Ohne Gentechnik standard available on the VLOG homepage <https://www.ohnegentechnik.org/en/for-businesses/standards/the-vlog-standard> (under VLOG-Standard (most recent version)).*



4.4. Purchase

These requirements are in addition to R 5.0 *Feed Responsibility Management Systems Requirements*.

4.4.1. Selection of suppliers

The certified company must purchase feed and/or services from a supplier according to the below specifications:

Purchase of	Accepted certificates:	Additional requirements
Compound feed	GMP+ GMO controlled	The activity production or trade of compound feed must be included in the scope of the certificate of the supplier.
	VLOG – 'Ohne Gentechnik' Production and Certification Standard	
	OQUALIM-STNO Technical Platform "GMO-free fed"	
	Certificates accepted by VLOG as equivalent	
Premixtures	In case the compound feeds are used (by the certified company) as an ingredient for the production of feed, it is allowed to select a supplier that is not certified for the above mentioned accepted certificates.	As long as the certified company has a confirmation from the supplier of the GMO-free status of the purchased compound feeds and complies with the requirements in this standard (focus especially on monitoring requirements).
	GMP+ GMO controlled	The activity production or trade of premixtures must be included in the scope of the certificate of the supplier.
	VLOG – 'Ohne Gentechnik' Production and Certification Standard	
	Certificates accepted by VLOG as equivalent	
In case the premixtures are used (by the certified company) as an ingredient for the production of feed, it is allowed to select a supplier that is not certified for the above mentioned accepted certificates.	As long as the certified company has a confirmation from the supplier of the GMO-free status of the purchased premixtures and complies with the requirements in this standard (focus especially on monitoring requirements).	
Feed additives	GMP+ GMO controlled	The activity production or trade of feed additives must be included in the scope of the certificate of the supplier.
	VLOG – 'Ohne Gentechnik' Production and Certification Standard	
	Certificates accepted by VLOG as equivalent	
	In case the feed additives are used (by the certified company) as an ingredient for the production of feed, it is allowed to select a supplier that is not certified for the above mentioned accepted certificates.	
Feed Material	GMP+ GMO controlled	The activity production or trade of feed materials must be included in the scope of the certificate of the supplier.
	VLOG – 'Ohne Gentechnik' Production and Certification Standard	
	OQUALIM-STNO Technical Platform "GMO-free fed"	
	Certificates accepted by VLOG as equivalent	



	<p>It is allowed to select a supplier that is not certified for the above mentioned accepted certificates.</p> <p>Note: buying a feed materials from a non-certified supplier and selling/using this as GMO controlled feed material is only allowed in case genetic modification can be technically detected in the feed material through PCR tests. (see § 4.3.2)</p>	<p>As long as the certified company has a written confirmation from the supplier of the GMO-free status of the purchased feed and complies with the requirements in this standard (focus especially on monitoring requirements).</p> <p>In case of trade of feed materials: no later than at the conclusion of a purchase agreement, the certified company must have a written confirmation from the supplier that the goods are not subject to compulsory GMO labelling (which must be batch-specific or for a specific period of time),</p>
Storage and Transshipment	<p>GMP+ GMO controlled</p> <p>VLOG – ‘Ohne Gentechnik’ Production and Certification Standard</p> <p>Certificates accepted by VLOG as equivalent</p>	<p>The activity storage and transshipment must be included in the scope of the certificate of the supplier.</p>
	<p>In case it concerns storage and transshipment of <u>packaged</u> GMO controlled feed, it is allowed to select a supplier that is not certified for the above mentioned accepted certificates.</p>	
Transport	<p>GMP+ GMO controlled</p> <p>GMP+ B4 Transport / TS 1.9 Transport activities</p> <p>VLOG – ‘Ohne Gentechnik’ Production and Certification Standard</p> <p>Certificates accepted by VLOG as equivalent</p>	<p>The activity transport must be included in the scope of the certificate of the supplier.</p>
	<p>As an exception to the requirement that suppliers must be selected with an accepted certificate, it is allowed to select a supplier who has no accepted certificate.</p>	
	<p>In case it concerns transport of <u>packaged</u> GMO controlled feed, it is allowed to select a supplier that is not certified for the above mentioned accepted certificates.</p>	<p>The purchase of transport must comply with the requirements as stated in TS 1.2 <i>Purchase</i>.</p>
Production or processing on contract basis (including private labelling, mobile grinding and mixing facilities)	<p>All accepted certificates that are listed above.</p>	<p>The activity production of feed must be included in the scope of the certificate of the supplier.</p>

**+ Helpful tip 1:**

The standards, which VLOG has recognized as equivalent to the VLOG – Ohne Gentechnik standard are available on the VLOG homepage (<https://www.ohnegentechnik.org/en/for-businesses/standards/the-vlog-standard>) under 'Further Documents/Instructions/Tools'.

+ Helpful tip 2:

Feed can only be labelled and sold as GMO controlled feed by a company/location that is certified in compliance with the requirements in this standard.

+ Helpful tip 3:

The certifications referred to in the above table are purely aimed at assuring the GMO controlled status of the feed. If the GMP+ certified company uses this certification in combination with a feed safety certification (such as the GMP+ FSA module), the company must of course also follow the purchasing requirements which apply for that feed safety certification.

4.4.2. Verification of incoming products and/or services

In case of outsourcing activities to third parties (for example subcontracts for storage, transport or other services), the certified company:

- a) ensures that this activity is purchased in compliance with the purchasing requirements in § 4.4.1. and;
- b) provides the third party with written instructions to ensure compliance with the requirements in this document.

4.4.2.1. Additional requirements for production

For each feed material classified as 'at risk' in the risk assessment, a confirmation of the non-GMO status from the supplier is required. This may be done by one or more of the following examples:

- a) a valid certificate in accordance with MI 5.4 *GMO controlled* (or equivalent) together with a declaration about the non-GMO status of the batch/lot being delivered;
- b) a test result according to the requirements of MI 5.4 *GMO controlled* (or equivalent) proving the non-GMO status of the batch/lot being delivered;
- c) an additional indication on the delivery slip declaring the products to be exempt from mandatory labelling;
- d) a clear contractual agreement regarding the delivery of feed exempt from mandatory labelling.

Furthermore, for feed additives and processing aids, to be processed in GMO controlled compound feed and feed materials it must be documented in writing that they are not subject to mandatory labelling obligations.



+ Helpful tip 1:

The certified company should verify that the incoming goods are exempt from mandatory labelling in accordance with Regulations (EC) 1829/2003 and 1830/2003.

+ Helpful tip 2:

Compound feed producers may apply the above mentioned requirements for their trading activities.

4.5. Informing the customer

These requirements are in addition to R 5.0 *Feed Responsibility Management Systems Requirements*.

4.5.1. Inform the customer about the status of the feed

+ Helpful tip 1:

An additional option for the certified company to demonstrably inform about the status of the feed is by using the wording "GMO controlled" for the feed materials and/or compound feed assured under his Feed Responsibility Management System.

Note: According to the VLOG standard livestock farmers demand a statement from their feed suppliers about the non-GMO status of the feed they receive.

The system must ensure that feed materials and/or compound feed which are subject to mandatory labelling are labelled in accordance with Regulations (EC) 1829/2003 or 1830/2003.

Note: For the use of logo's and trademarks, see F 0.1 Rights and Obligations.

+ Helpful tip 2:

The BVL document "BVL-Guideline for Monitoring GMOs in Feed" gives examples of situations where mandatory labelling is required or not. This guideline is available on the VLOG homepage (<https://www.ohnegentechnik.org/en/for-businesses/standards/the-vlog-standard> under 'Further Documents/Instructions/Tools') to assist the feed business.



4.6. Verification

These requirements are in addition to R 5.0 *Feed Responsibility Management Systems Requirements*.

4.6.1. External communication

 **Helpful tip:**

Measures to be taken as a result of the complaint may include the labelling and blocking of products.



5. Supply chain models

These requirements are in addition to R 5.0 *Feed Responsibility Management Systems Requirements*.

 **Helpful tip:**

Only § 5.2.1 and § 5.2.2 of R 5.0 *Feed Responsibility Management Systems Requirements* are relevant and can be applied for the scope of MI 5.4 *GMO controlled*.

5.1. Segregation

Vehicles must be demonstrably dry cleaned after transporting bulk raw materials or feed labelled as genetically modified pursuant to Regulations (EC) No. 1829/2003 and 1830/2003.

 **Helpful tip:**

This requirement for cleaning after transport of agricultural products is already included in the GMP+ FSA certification.



6. Sampling and Testing

6.1. General

Sampling is done in compliance with relevant EU legislation and/or already accepted sampling standards.

 **Helpful tip:**

Accepted sampling standards are for example GAFTA and FOSFA.

6.2. Monitoring plan

6.2.1. Feed in which genetic modification cannot be detected

If the certified company only uses feed in which, due to technical limitations, genetic modification cannot be detected through PCR tests, no sampling/GMO test is necessary. This must be concluded from the risk assessment.

 **Helpful tip:**

The VLOG document "Suitability of GMO Analysis for Feed, Raw Materials and Food" explains which in products GMOs can and cannot be detected. This document is available on the VLOG homepage (<https://www.ohnegentechnik.org/en/for-businesses/standards/the-vlog-standard> under 'Further Documents/Instructions/Tools').

6.2.2. Feed in which genetic modification can be detected.

The certified company must have a monitoring plan that describes the sampling and testing procedure. This plan must be carried once a year.

The monitoring plan must at least contain:

- a) requirements to sample takers;
- b) sampling method:
 - 1) product to be sampled;
 - 2) place of sampling;
 - 3) method of taking aggregate samples and retained samples;
 - 4) sample size and number of samples;
 - 5) sealing and identification;
- c) storage duration of samples;
- d) documentation of samples;
- e) sampling frequency;
- f) name of the VLOG-recognized laboratory to be used for testing.



6.2.2.1. Requirements to sample takers

The sample taker complies with the requirements for samplers as laid down in TS 1.6 *Sampling*.

6.2.2.2. Storage duration of samples

The storage duration of samples matches the use and shelf life of the sampled product.

6.2.2.3. Sampling and Testing frequency

The frequency of sampling and testing is based on the certified company's individual risk assessment and is in compliance with the requirements in Annex 1. For each outgoing batch, at least one retained sample is taken.

A trader may make use of representative samples and testing results from the producer (supplier). Each final sample is tested.

Helpful tip:

The auditor is authorized to take additional samples and/or carry out additional GMO tests on a risk-targeted basis or in suspicious cases.

6.2.2.4. Sample preparation and Analysis

Depending on the sample matrix, the following minimum amounts of sample material are to be completely milled in each case:

- a) feed: min. 400 g, max. 1 kg, entirely milled;
- b) raw materials (whole maize/corn kernels, soy beans or rapeseed/canola grains, among other): at least 3000 kernels or approx. the respectively corresponding sample amount (maize/corn at least 1000 g; soy at least 700 g, rapeseed/canola at least 60 g), entirely milled.

Helpful tip 1:

The sample size as required in MI 5.4 GMO controlled is larger than the sample size as required under GMP+ FSA certification as stated in TS 1.6 *Sampling*.

The testing on GMOs is carried out by a laboratory recognized by VLOG.

Helpful tip 2:

The list of VLOG-recognized laboratories is available on the VLOG homepage (<https://www.ohnegentechnik.org/en/for-test-laboratories/recognised-laboratories>).



When commissioning a laboratory, the following information must be indicated in the order or other documents having similar effect, and submitted to the laboratory:

- a) order of VLOG test (GMO tests) according to the VLOG requirements for laboratories as stated in the guideline for VLOG-recognition of laboratories;
- b) composition of the sample.

If containing soy, maize/corn, rapeseed/canola and/or rice feed material or ingredients, it must be indicated in what form these are contained (e.g. maize/corn as maize/corn mash, soy as soy extraction meal) and the composition of the compound feed.

 **Helpful tip 3:**

The 'Guideline for the VLOG recognition of laboratories' is available on the VLOG homepage (<https://www.ohnegentechnik.org/en/for-test-laboratories/requirements-laboratories/guideline-for-test-laboratories>) under 'Further Documents/Instructions/Tools'. Annex 1 of this guideline specifies which GMOs are included in the GMO analyses carried out by VLOG-recognized laboratories.

6.3. Handling of positive test results

The certified company must establish a system for handling positive test results. This must include appropriate measures like the labelling/blocking of noncompliant products and a recall procedure.

In case of contamination, appropriate corrective action must be initiated and documented. The effectiveness is to be reviewed as part of self-monitoring.

Positive test results are to be handled according to Appendix 2.

 **Helpful tip 1:**

The BVL document "BVL-Guideline for Monitoring GMOs in Feed" can be helpful when interpreting the analysis results. This guideline is available on the VLOG homepage (<https://www.ohnegentechnik.org/en/for-businesses/standards/the-vlog-standard>) under 'Further Documents/Instructions/Tools' to assist the feed business.



Appendix 1 Sampling and Testing

The tables below specify the sampling and testing frequency for GMO controlled feed materials, feed additives, premixtures and compound feed. The sampling and testing frequency applies only to the products that fall under the scope of this standard.

The sampling and testing frequency is calculated based on 88% dry matter content.

The sampling and testing frequency is to be implemented by certified companies producing and/or trading GMO controlled feed materials, feed additives, premixtures and/or compound feed.

1. Producing companies

The table below provides the sampling and testing frequency for certified companies producing GMO controlled feed material, feed additives, premixtures and compound feed.

	Incoming goods	Outgoing goods
Production activity on location certified company	<ul style="list-style-type: none"> - Feed material - Feed additive - Premixture 	<ul style="list-style-type: none"> - GMO controlled feed materials* - GMO controlled feed additive - GMO controlled premixture - GMO controlled compound feed
Production completely exempt from mandatory labelling	1 sample & test of every batch of at risk feed materials, feed additive, premixture	<p>< 10,000 t/year: 1 sample & test</p> <p>≥ 10,000 to 50,000 t/year: 2 samples & tests</p> <p>≥ 50,000 to 100,000 t/year: 4 samples & tests</p> <p>≥ 100,000 to 200,000 t/year: 6 samples & tests</p> <p>≥ 200,000 to 300,000 t/year: 8 samples & tests</p> <p>For every additional 100,000t (or part thereof)/year: 2 additional samples & tests</p>
Production of GMO controlled feed and non-GMO controlled feed subject to mandatory labelling	1 sample & test of every batch of at risk feed materials, feed additive, premixture	<p>< 2,000 t/year: 1 sample & test</p> <p>≥ 2,000 to 5,000 t/year: 3 samples & tests</p> <p>≥ 5,000 to 10,000 t/year: 5 samples & tests</p> <p>≥ 10,000 to 50,000 t/year: 10 samples & tests</p> <p>≥ 50,000 to 100,000 t/year: 15 samples & tests</p> <p>≥ 100,000 to 200,000 t/year: 20 samples & tests</p> <p>≥ 200,000 to 300,000 t/year: 25 samples & tests</p> <p>For every additional 100,000 t (or part thereof) /year: 5 additional samples & tests.</p>

* Certified companies who only produce feed materials not subject to mandatory labelling can dispense with sampling of the outgoing feed materials if corresponding test was performed on the incoming goods.

**2A. Trading companies**

The table below provides the sampling and testing frequency for certified companies trading GMO controlled feed.

	GMO controlled feed present on location certified company	
	Bulk	Packaged
Products present on location certified company and/or subcontracted storage location	Minimum number of samples & tests for <u>outgoing</u> feed a year	
<u>Only</u> bulk GMO controlled feed	< 10,000 t/year: 1 sample & test ≥ 10,000 to 50,000 t/year: 2 samples & tests ≥ 50,000 to 100,000 t/year: 4 samples & tests ≥ 100,000 to 200,000 t/year: 6 samples & tests ≥ 200,000 to 300,000 t/year: 8 samples & tests	No (additional) sampling and testing
Bulk GMO controlled feed <u>and</u> bulk feed exempt from mandatory labelling	For every additional 100,000t (or part thereof) /year: 2 additional samples & tests	
Bulk GMO controlled feed <u>and</u> bulk feed subject to mandatory labelling <u>and</u> if certified company does not know which products are present at the subcontracted storage location	< 2,000 t/year: 1 sample & test ≥ 2,000 to 5,000 t/year: 3 samples & tests ≥ 5,000 to 10,000 t/year: 5 samples & tests ≥ 10,000 to 50,000 t/year: 10 samples & tests ≥ 50,000 to 100,000 t/year: 15 samples & tests ≥ 100,000 to 200,000 t/year: 20 samples & tests ≥ 200,000 to 300,000 t/year: 25 samples & tests For every additional 100,000 t (or part thereof) /year: 5 additional samples & tests	No (additional) sampling and testing

**2B. Trading companies converting into GMO controlled feed materials**

The table below applies to the certified company, as meant in paragraph 4.3.1 above, who buys a feed material from a non-certified supplier in which genetic modification can be technically detected through PCR tests and sells this feed material as GMO controlled.

	Incoming goods	Outgoing goods
Trading activity on location certified company	Feed materials	GMO controlled feed materials
Only bulk GMO controlled feed materials which is exempt from mandatory labelling	1 sample & test of every batch of at risk feed materials	<p>< 10,000 t/year: 1 sample & test ≥ 10,000 to 50,000 t/year: 2 samples & tests ≥ 50,000 to 100,000 t/year: 4 samples & tests ≥ 100,000 to 200,000 t/year: 6 samples & tests ≥ 200,000 to 300,000 t/year: 8 samples & tests</p> <p>For every additional 100,000t (or part thereof) /year: 2 additional samples & tests.</p>
Bulk GMO controlled feed materials and bulk feed subject to mandatory labelling and, if applicable, bulk feed exempt from mandatory labeling	1 sample & test of every batch of at risk feed materials	<p>< 2,000 t/year: 1 sample/test ≥ 2,000 to 5,000 t/year: 3 samples & tests ≥ 5,000 to 10,000 t/year: 5 samples & tests ≥ 10,000 to 50,000 t/year: 10 samples & tests ≥ 50,000 to 100,000 t/year: 15 samples & tests ≥ 100,000 to 200,000 t/year: 20 samples & tests ≥ 200,000 to 300,000 t/year: 25 samples & tests</p> <p>For every additional 100,000 t (or part thereof) /year: 5 additional samples & tests.</p>
At risk* feed materials and delivered directly to the customer	1 sample & test of every batch	
Not at risk* soy, rapeseed/canola, corn/maize, sugar beets or cotton delivered directly to the customer	1 sample & test every year	

* based on the certified company's individual risk assessment



Appendix 2 Evaluation of test results and measures to be taken

Second or third analyses of the sampled batch are permitted, but must be performed immediately (express analysis). If two test results with different conclusions are obtained for a single sample, the following procedure is to be undertaken, resulting in a final finding:

- a. if the results overlap, taking into account the expanded measurement uncertainty, the average value of the two test results is used;
- b. if the results do not overlap, taking into account the expanded measurement uncertainty, a third test of the batch is ordered.

The customer is informed (on request) periodically about positive test results related to the delivered batches and receives a summary or overview of the results.

In the event of inaccurately labelled feed or food product placed on the market, the customers and Certification Body must be notified with at least the information as mentioned in the table below.

The internal auditor examines whether the analytical test results were evaluated correctly and any necessary (corrective) measures were properly implemented.

In case the test result of a feed material, feed additive, premixture or compound feed is between 0.1% and 0.9% GMO ($0.1\% \text{ GMO} < x \leq 0.9\% \text{ GMO}$), then the certified company:

- a. informs the (feed) supplier;
- b. takes the measures for improvement and validation. The results of the validation are documented and are available upon request.

In case the test result of a feed material, feed additive, premixture or compound feed is above 0.9% GMO, then the certified company undertakes the following actions:

- a. inform the (feed) supplier, and;
- b. in the case of rejection, notice to producers of „Ohne Gentechnik“ food products of animal origin.

Helpful tip:

With 'producers of „Ohne Gentechnik“ food products of animal origin' is meant the livestock farmer.



The certified company must provide his (feed) supplier and/or producers of „Ohne Gentechnik“ food products of animal origin with at least the information as mentioned in the table below.

Feed (exact name)	<input type="checkbox"/> Compound feed <input type="checkbox"/> Feed materials <input type="checkbox"/> Feed additive <input type="checkbox"/> Premixture
Delivery date	
Batch identification number	
Number of delivery slip, if applicable	
Date of delivery slip, if applicable	
Date sample taken	
Place sample taken	
Unique sample identification (e.g. SampleID)	
Date of test report	
Species with finding of GMO content (e.g. soy, maize/corn, ...)	
Test result (PCR)	Species: GMO positive, >0.9%; exact value: % of which Event 1 % Event 2 % Species: GMO positive, >0.9%; exact value: % of which Event 1 % Event 2 %
In the case of compound feed: Species with finding of GMO content declared as compound feed component?	<input type="checkbox"/> Yes If declared: Quantity of species: % <input type="checkbox"/> No Quantified amount of species: %
Customer(s) affected, if applicable	



Feed Support Products

That was a lot of information to digest and one might ask, what is the next step? Luckily we can offer support for the GMP+ Community when doing this. We provide support by means of various tools and guidances but as each company has a shared responsibility to feed safety, and therefore tailor-made solutions cannot be offered. However, we do help by explaining requirements and provide background information about the requirements.

We have developed various supporting materials for the GMP+ Community. These include various tools, ranging from Frequently Asked Questions (FAQ) lists to webinars and events.

Supporting materials related to this document (Guidelines and FAQ's)

We have made documents available which give guidance to the GMP+ requirements as laid down in the module GMP+ FSA and GMP+ FRA. These documents give examples, answers to frequently asked questions or background information.

Where to find more about the GMP+ International Feed Support Products

Fact sheets

More information: <https://www.gmpplus.org/en/services/feed-support-products/fact-sheets/>

Review fact sheets:GMP+ Portal <https://gmpplus.org/en/feed-certification-scheme-2020/gmp-fsa-fra-certification/support/>

At GMP+ International, we believe everybody, no matter who they are or where they live, should have access to safe food.

GMP+ International

Braillelaan 9

2289 CL Rijswijk

The Netherlands

t. +31 (0)70 – 307 41 20 (Office)

+31 (0)70 – 307 41 44 (Help Desk)

e. info@gmpplus.org

Disclaimer:

This publication was established for the purpose of providing information to interested parties with respect to GMP+-standards. The publication will be updated regularly. GMP+ International B.V. is not liable for any inaccuracies in this publication.

© GMP+ International B.V.

All rights reserved. The information in this publication may be consulted on the screen, downloaded and printed as long as this is done for your own, non-commercial use. For other desired uses, prior written permission should be obtained from the GMP+ International B.V.