Specific Requirements for Risk-Prone Raw Materials / Ingredients

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According to chapter G 5 of the „Ohne Gentechnik“ - Production and Certification Standard this document contains the specific requirements that have to be fulfilled for a certification of risk-prone raw materials / ingredients. This document will be updated regularly. All information is without engagement and does not replace the judgment made on the companies or farmers own authority.

1. Rice and Rice Products

In the EU, no genetically modified variety of rice has been approved and therefore none is marketable. Thus, there is zero-tolerance for traces of genetically modified rice. In general, minor traces of genetically modified materials (e.g. corn, soy, rape) approved in the EU, which are technically unavoidable or adventitious, up to a maximum of 0.1% are tolerated in rice and rice products that are labelled “Ohne Gentechnik”.

1.1 Sampling and Analysis

The specific requirements for sampling and analysis are defined below. These sampling and analysis requirements must be taken into account in the sampling and analysis plans of VLOG-certified companies.

For the purposes of VLOG certification of rice and rice products and verification in accordance with EGGenTDurchfG/VLOG Standard, only analytical results determined in accordance with the following requirements by a VLOG recognised laboratory will be recognised.

1.1.1 Sampling frequency

The sampling frequency is to be as follows:

<table>
<thead>
<tr>
<th>Sector</th>
<th>Sampling frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inspection of incoming raw goods</td>
<td></td>
</tr>
<tr>
<td>European raw goods: rice and rice products</td>
<td>6x per year</td>
</tr>
<tr>
<td>Inspection of incoming raw goods</td>
<td></td>
</tr>
<tr>
<td>Asian raw goods: rice and rice products</td>
<td>each batch</td>
</tr>
<tr>
<td>Inspection of incoming raw goods</td>
<td></td>
</tr>
<tr>
<td>Raw goods of non-European and non-Asian origin: rice and rice products</td>
<td>12x per year</td>
</tr>
<tr>
<td>Outgoing goods</td>
<td></td>
</tr>
<tr>
<td>Prepared, processed rice products</td>
<td>4x per year</td>
</tr>
</tbody>
</table>

1 The risk-based requirements
• regarding sampling frequency depending on the origin of the raw goods and
• the scope of the analysis/procedure
are regularly reviewed by VLOG and adjusted, if necessary.
Sampling procedure:

- Sampling must be done by a neutral and qualified third party.
- Raw goods:
  x individual samples of 0.5 kg each from a batch shall be carefully mixed to achieve a composite sample in accordance with the following requirements.

<table>
<thead>
<tr>
<th>Size of the batch (in t)</th>
<th>Size of the composite sample (in kg)</th>
<th>Number of individual samples (0.5 kg each)</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤50</td>
<td>2.5</td>
<td>5</td>
</tr>
<tr>
<td>100</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>250</td>
<td>12.5</td>
<td>25</td>
</tr>
<tr>
<td>≥500</td>
<td>25</td>
<td>50</td>
</tr>
</tbody>
</table>

With batches of 50 to 500 metric tons, the composite sample should be 0.005% of the total size of the batch. With batches below 50 metric tons, the size of the composite sample should be 2.5 kg. With batches in excess of 500 metric tons, the size of the composite sample should be 25 kg.

- Prepared, processed rice products:
  Depending on the number of packages per batch, y individual samples shall be drawn from x packages and carefully mixed to achieve a composite sample in accordance with the following requirements.
  1-25 packages in the batch: at least 1 individual sample; 26-100 packages in the batch: at least 5 individual samples; >100 packages in the batch: at least 10 individual samples
  - A laboratory sample and two reference samples of at least 500 g to 1 kg each shall be drawn from the carefully commingled composite sample.

1.1.2 Frequency of analysis

Every laboratory sample that is drawn from the composite sample in accordance with the aforementioned procedure is to be analysed in accordance with the following requirements.

1.2 Testing Process

Preparation of laboratory samples:

Two subsamples of at least 250 g each are to be created from the laboratory sample sent, and each is to be analysed separately (1 extraction, 2 PCRs per subsample:).

Procedure for the analysis:\n
1. Element-specific screening:
   p35S + tNOS + cry1Ab/cry1Ac sequence

2. Design-specific proof:
   Identification, by agreement between the company and the laboratory, of GMO events that cause a positive screening result (see 1).

3. Exclusion of botanical impurities (GMO carryovers from other plant species) from corn, soy, cotton and (naturally occurring) Cauliflower Mosaic Virus

If the element-specific screening yields a positive result, design-specific proof is to be provided as the next step. In combination with the exclusion of botanical impurities and the Cauliflower Mosaic Virus, an investigation is to be made of whether the sample contains genetically modified rice.
**Evaluation of the PCR results:**

If the targeted sequence of genetically modified rice is proven for at least one of the subsamples analysed, this result is to apply to the entire sample and the batch. The batch cannot be marketed in the EU and cannot be labelled with the “Ohne GenTechnik” seal.

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**2. Salmon filet and salmon products**

In the EU, no genetically modified variety of salmon has been approved and therefore none is marketable. Thus, there is zero-tolerance for traces of genetically modified salmon.

**2.1 Sampling and Analysis**

The specific requirements for sampling and analysis are defined below. These sampling and analysis requirements must be taken into account in the sampling and analysis plans of VLOG-certified companies.

For the purposes of VLOG certification of salmon filet and salmon products and verification in accordance with EGGentDurcfG/VLOG Standard, only analytical results determined in accordance with the following requirements by a VLOG recognised laboratory will be recognised.

**2.1.1 Sampling and Testing Frequency**

<table>
<thead>
<tr>
<th>Area</th>
<th>Yearly minimum sampling/ testing at the „Ohne Gentechnik“ incoming goods</th>
</tr>
</thead>
<tbody>
<tr>
<td>European and Norwegian Salmon filet and salmon products</td>
<td>6x per year</td>
</tr>
<tr>
<td>North American salmon filet and salmon products</td>
<td>each batch</td>
</tr>
</tbody>
</table>

**2.2 Testing Process**

**Maceration:**

Depending on the testing matrix, the following minimum quantities of sample material are macerated, respectively:

- Salmon filet: at least 5 g from at least 10 animals, completely macerated
- Salmon products: at least 50 g, completely macerated

**DNA extraction:**

At least 2 DNA extractions are performed on each sample following maceration/homogenisation. The required weight is at least 2000 mg.

**Procedure for the analysis:**

**Design-specific proof:**

AquAdvantage® Atlantic salmon (Salmo salar)
**PCR test:**
Real-time PCR methods with probe technology (45 cycles) are recommended. When using conventional endpoint PCR methods, an additional confirmation reaction is carried out (e.g. real-time PCR with probe technology, restriction test or sequencing).

**Evaluation of the PCR results:**
If the targeted sequence of genetically modified salmon is proven for at least one of the subsamples analysed, this result is to apply to the entire sample and the batch. The batch cannot be marketed in the EU and cannot be labelled with the “Ohne GenTechnik” seal.