Albert Heijn protocol for residue control

Version 2.0

May 2012
## Table of contents

1. Introduction ......................................................................................................................... 3  
2. Documents .......................................................................................................................... 4  
3. Requirements ...................................................................................................................... 5  
4. Flowchart ............................................................................................................................ 6  
5. Procedures, roles and responsibilities ................................................................................. 8  
6. Sampling schedule ............................................................................................................ 10  
7. The audit process ............................................................................................................. 12  
8. Confidentiality .................................................................................................................. 12  
9. Indemnification ................................................................................................................. 12  
Appendix 1 Glossary ................................................................................................................ 14  
Appendix 2 Checklist for growers/producers ................................................................. 17  
Appendix 3 Explanation of residue standards (EU-MRL and ArFD) ...................................... 18  
Appendix 4 Cost of the Albert Heijn protocol ......................................................................... 19  
Appendix 5 Contact details of service providers .............................................................. 20
1. Introduction

Suppliers are responsible and liable for meeting statutory requirements related to pesticide residues on fresh products. An EU Maximum Residue Level (EU-MRL) and/or Acute Reference Dose (ARfD-NL) has been determined for many agents. If no EU-MRL or ARfD-NL has been determined for an agent, the detection level applies.

Since Albert Heijn obtains its fresh produce from production areas around the world, Albert Heijn sets procurement demands to guarantee full implementation of legislation on EU-MRL and ARfD-NL for fresh products.

For this reason Albert Heijn has prepared a protocol in addition to GlobalGAP to manage residue levels at the source: growers and the packing stations of suppliers. The objectives of this Protocol are as follows:

- Guidance and support for suppliers;
- Full transparency concerning traceability and the use of pesticides;
- A good risk analysis that properly reflects the chances of exceedance and control measures;
- Systematic verification through GlobalGAP;
- A sampling system that demonstrates compliance with the required standards;
- The cost of the system rests with the suppliers and producers and they are jointly responsible for guaranteeing residue levels. Appendix 4 contains more information about the costs of the Albert Heijn protocol.

This protocol is based on a risk analysis with control measures and samples quantities, depending on the identified risks. The suppliers are responsible for implementation and the service providers coordinate this implementation.

Growers are audited annually in conjunction with the annual GlobalGAP audit.
2. Documents

The Albert Heijn protocol for fresh products is based on the following documents:

1. Introduction letter
2. This booklet
3. The risk analysis (web version or Microsoft Excel)
4. Forms (web version or Microsoft Excel)
   a. Proof of participation
   b. Incident report form
5. Checklist + interpretation document

The service providers are responsible for managing all documentation related to the Albert Heijn Protocol and for informing all parties involved on changes to the documentation.

The service provider must have updated copies of the Albert Heijn protocol and related documents.
3. Requirements

Residue
Albert Heijn strives for a maximum residue level of 50% EU-MRLs and/or 50% ARfD-NL. If this target is exceeded,
- the supplier must inform the service provider of the excess.
- the supplier will be deemed to have been given an explanation about the excess and control measures must be put in place in cooperation with the service providers to prevent exceedance in future.

The standards for residues of pesticides used at Albert Heijn are:
- 100% EU MRL
- and 100% ARfD-NL
Anything above this standard will lead to rejection of the product.

Appendix 3 provides an explanation of the background and the standards and a sample calculation is provided.

Note: No requirements are set for the number of pesticides or for quantities of pesticide.

The current EU-MRLs can be accessed at http://ec.europa.eu/sanco_pesticides/public/index.cfm

The current ARfD-EN standards will be provided to suppliers by Laboratorium Zeeuws-Vlaanderen.

Traceability
The supplier must be able to trace a product to a plot within 4 hours. Albert Heijn and the service providers will perform traceability tests on a regular base.
4. Flowchart

**Risk analysis + audit**

Start

Service Provider collects information about suppliers, products, programmes, volume and country of origin and then provides documents from the Albert Heijn protocol to the supplier.

The service provider provides the documents to the supplier.

The supplier completes the supplier declaration and prepares a risk analysis with the producers.

The supplier prepares the risk analysis in collaboration with the producers. The supplier is deemed to have sent the risk analysis and proof of participation 4 weeks before the start of the season to the service provider. If delivery has already started the supplier has 4 weeks' time to send the risk analysis + supplier's declaration to the service provider.

The Service provider assesses the risk and prepares a sampling schedule. The approved risk analysis + sampling schedule is returned to the suppliers.

The service provider will assess and return the risk analysis within 7 days of receipt. The service provider prepares a sampling schedule and sends it back to the supplier.

The supplier will implement the approved risk analysis at the producers. It is mandatory for the producers to have access to the approved risk analysis at the time of an audit.

The supplier will inform all of the producers in writing of the approval after receiving the risk analysis. The supplier must also ensure that relevant information from the risk analysis is forwarded to the producers.

The producers inform the certification institute about participation in the Albert Heijn Protocol.

The producer must inform the certifying institute immediately after receipt of the approved risk analysis so that an audit can be planned.
Albert Heijn Protocol for residue control

The certification institute conducts the audit at the producer. The findings are directly uploaded to the Food Plus database.

End

Incident management

The producer or supplier discovers that the 50% threshold has been exceeded in a sample or a critical situation, whereby the probability of exceeding the 50% EU-MRL or ARfD-NL threshold is very real.

The supplier keeps the service provider up-to-date about findings and details and prepares control measures (possibly with the producer) in order to remain in compliance with the standard.

The service provider assesses the control measures of the supplier.
5. Procedures, roles and responsibilities

**Producer**
- Provide the supplier with information about the lot (including GPS coordinates).
- Implement and maintain control measures from the risk analysis.
- If test results should exceed the Albert Heijn limits (50% EU-MRL and/or 50% ARfD-NL) the producer must inform the supplier. The producer prepares a declaration and plan of action with control measures, in collaboration with the supplier.
- Request an audit from Food Plus and the certifying institute of GlobalGAP.
- If applicable: report additional procurement to the supplier.

**Supplier**
- Sign the supplier declaration and send it to the service provider.
- Responsible for the implementation of the Albert Heijn protocol at its producers.
- Distribute the Albert Heijn protocol among producers and ensure that the protocol at the supplier itself and the producers is up-to-date.
- Forward information about lots of supplying producers to the service provider.
- Perform a risk analysis in collaboration with the producer(s).
- Implement control measures in collaboration with the producer(s).
- Distribute the approved risk analysis among producers
- Organise and carry out sampling if required.
- If test results should exceed the Albert Heijn limits (50% EU-MRL and/or 50% ARfD-NL) the supplier must inform the service provider. The service provider will then decide with the supplier which further measures should be taken.
- The supplier must reply to this information within 48 hours or pose additional questions.
- If applicable: report additional procurement to the service provider. The service provider will then decide with the supplier which further measures should be taken.

**Service provider**
- Keep the Albert Heijn protocol up-to-date and make it available to all stakeholders.
- Asses the risk assessment of suppliers.
- Prepare, update and send a sampling schedule to suppliers.
- Provide instructions with independent sampling.
- Asses the sample analysis.
- If it has been determined that the thresholds have been exceeded or if a critical situation occurs, the internal procedure of the service provider is followed to analyse the cause, to deal with the non-compliant products and to make a decision about the sampling requirements regime for subsequent consignments
- Prepare management reports and share that with Albert Heijn
• Reporting exceedance of the 100% EU MRL and/or 100% ARfD-NL thresholds to the GlobalGAP database.
• Report 100% EU-MRL exceedance to the Dutch Food Authority (NVWA).
• Perform traceability tests

**Auditor / CI**
• Perform the Albert Heijn audit protocol.
• Follow up on corrective action plans, equivalent to the GlobalGAP procedure.
• Upload information in the Food Plus database.
• If required, perform additional assessments if the MRL is exceeded.

**Independent sampling**
• Independent samples must be taken in accordance with EU Directive 2002/63/EC.
• Samples are sent to the designated laboratory.
• Identify which samples are intended for the Albert Heijn residue database, which is housed in Laboratorium Zeeuws-Vlaanderen.

**Laboratory**
• Send the results to Laboratorium Zeeuws-Vlaanderen (for the Albert Heijn residue database) and to the supplier.
• Test the results to the Albert Heijn requirements.
• Report when the Albert Heijn threshold is exceeded (50% EU MRL or 50% ARfD).

**Laboratorium Zeeuws-Vlaanderen**
• Collect result analysis.
• Management of analysis results in the Albert Heijn residue database.
• Management reports for service providers every 4 weeks.
• Provide support to approved laboratories.

**Food Plus**
• Make an online platform available to certification bodies, service providers and suppliers, containing information about suppliers, audits and certification.
• Auditor training and qualification.
• Coordination of CIs regarding audits.
• Maintain system integrity through integrity audits.
6. Sampling schedule

The number of samples is defined in the table below.
The service provider determines who will take independent samples.

<table>
<thead>
<tr>
<th>Table</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Category</strong></td>
</tr>
<tr>
<td><strong>N</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>1</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>2</strong></td>
</tr>
<tr>
<td>- cultivation</td>
</tr>
<tr>
<td>- post-harvest</td>
</tr>
<tr>
<td><strong>3</strong></td>
</tr>
<tr>
<td>- cultivation</td>
</tr>
<tr>
<td>- post-harvest</td>
</tr>
<tr>
<td><strong>4</strong></td>
</tr>
<tr>
<td>- cultivation</td>
</tr>
<tr>
<td>- post-harvest</td>
</tr>
</tbody>
</table>

Comments

1) If the number of samples are greater than the number of identical parties, the number of samples is equal to the number of parties. This applies if the following conditions apply for each lot:
   - exactly the same plot
   - exactly the same sowing/planting date
   - exactly the same harvest date or harvest period (if no field application was applied between harvests)
   - exactly the same crop protection (agent, dosage, treatment date, application technique)
   - no post-harvest
2) Number of samples is rounded up.
3) Only independent samples are defined in the table. The service provider is authorised to include requirements on local samples from the supplier.
4) The table is used to determine the number of samples. The service provider determines the time when the samples are taken.

Switching rules

The sampling schedule is used in real-time.
The service provider can switch a supplier from Category 2 to Category 1, or from Category 3 to Category 2 under the following conditions:
- The supplier has previously submitted a written report to the service provider regarding a critical situation or critical period(s).
- The vendor has implemented demonstrable control measures to minimise 100% risk exceedance.
- The supplier uses a strict sampling schedule, where all of the results are clearly visible to the service provider.

**Independent sampling**

Independent sampling must meet the following conditions:
- The coordination of sampling and the sampling itself must be undertaken by an independent person or institute, such as a service provider of Food Experts.
- The person taking the samples must have no relevant prior knowledge about the potential presence of residues in the relevant lot.
- The supplier/producer is not involved in the transport of the sample to the laboratory.
- The laboratory that performs the analysis must be Q&S certified.
- The laboratory that performs the analysis must send the results directly to Laboratorium Zeeuws-Vlaanderen. This is done without the intervention of the supplier/manufacturer.

The service provider determines which institute is authorised to carry out independent sampling.
7. The audit process

The verification step in the protocol is coordinated by the service provider. Food Plus is responsible for the integrity of the Albert Heijn protocol. Food Plus has also made a database available where information on the audits is placed.

**Frequency**

The audit will take place simultaneously with the GlobalGAP audit. Verification of the Albert Heijn protocol will take approximately 30 minutes to complete.

**Approval**

After completion of the assessment, the certification institute will upload the results into the database of Food Plus. If deficiencies are identified during the audit, the grower/supplier must take corrective measures within 28 days. The auditor must plan for assessing and approving the corrective measures. The certification institute evaluates the audit findings and approves them.

If a grower/supplier should lose his/her GlobalGAP certificate, approval for the Albert Heijn protocol is also withdrawn.

**Expertise auditors and certification bodies**

The auditor or inspector of the Albert Heijn protocol must be a certified auditor for GlobalGAP. The certification institute must be accredited for GlobalGAP.

8. Confidentiality

Albert Heijn suppliers have knowledge of, and agree with the fact that Albert Heijn and the service providers may have access to the results of laboratory research, the results of audits, assessments and other relevant information with respect to the supply of fresh products. Albert Heijn, the service providers and Food Plus will handle all information obtained during an assessment (audit), test or other activities related to suppliers/growers of fresh produce with confidentiality.

9. Indemnification

Albert Heijn, service providers, Food Plus or other designated agents shall in no way be liable for any losses, damage, costs or expenses of any kind, including indirect losses incurred by a supplier or service provider arising directly or indirectly from this Protocol, unless such loss, damage complaints, charges and/or expenses have resulted...
from definitive and legally established gross negligence or wilful misconduct of that person. This protocol is governed by Dutch law. Claims and legal action shall be assessed by the court in the Netherlands.
Appendix 1  Glossary

The following terms have been provided with a definition in accordance with their linguistic use in the context of the Albert Heijn Protocol (in alphabetical order):

**Active ingredient**
Any agent contained in a pesticide that eliminates insects, diseases or weeds or that otherwise keeps them under control, as well as growth regulators. Pesticides are primarily permitted based on their active agents.

**ARfD = Acute Reference Dose**
The ARfD is an estimate of the quantity of a substance contained in a product that people can consume within a 24 hour period without significant health effects. The ARfD is expressed in mg/kg body weight.

**Audit / assessment**
An external investigation of the Albert Heijn Protocol to determine if the grower/supplier meets all requirements related to quality, traceability and food safety (EU legislation on pesticides and MRLs) of fresh products. This is performed by qualified and independent auditors of CBs, in addition to GlobalGAP, combined into one audit.

**Batch**
A group of products with common characteristics (size, commercial category, type of packaging, labelling) that consists of the same or different lot numbers, packed at the same time and under similar conditions in the packing station and that is ready for delivery to the customer. All products originating from a single lot come from Albert Heijn controlled lots.

**Control measures**
Action to be taken by the grower/supplier to reduce or eliminate a perceived risk, including appropriate residue control (residues under 50% EU-MRLs).

**Sampling**
Taking of a representative number of samples from a plot, crop or geographic area in accordance with the risk analysis, with the aim to analyse residue pesticides, after which the results are compared to the EU legislation (active substances and EU-MRL).

**CAP**
Corrective action plan

**CI**
Certification Institute: an independent EN 45011 accredited institution that evaluates suppliers on the basis of the Albert Heijn protocol through inspections.

**Consignment**
A lot or group of lots delivered at the same time to a customer using the same method of transport.
**Crop treatment**
The application of phytosanitary products on a crop. The grower must register each type of pesticide, including the lot or parts of a lot where the substance is used, the agent used, dosage, date, method of application, equipment used, reason for application, etc. (see GlobalGAP requirements).

**GlobalGAP**
Audit and certification standard for agricultural producers

**HACCP**
Hazard Analysis Critical Control Points based on the Codex Alimentarius to ensure food safety.

**LOD**
Limit of detection The lowest amount of a substance (active ingredient) that can be demonstrated through an analytical method.

**Lot**
Products (same crop) from the same plot and grower with common properties that are delivered at the same time at a packaging station to be packed for customers. During processing at the packing station, these products can be combined with products from different lots in order to mix lots together based on size, trade category, packaging, etc. All products must be produced by Albert Heijn controlled sites.

**Mass balance**
The amount of product originating from one lot, received by a packing station, which corresponds to the quantity of the shipped product, minus losses and products not suitable for delivery.

**Pesticide**
Any substance or mixture of substances intended to control insects, weeds, fungi and other forms of plants and animals that are considered to be harmful.

**PHI = Pre Harvest Interval**
A period that the grower must take into account between the last crop treatment with pesticides and harvest.

**Phytosanitary products**
Products used to eliminate or control the negative effects of diseases and pests. This could be in the form of chemicals (with MRLs and approved by the EU) or substances used in organic agriculture, such as soap and vinegar. All agents must be recorded in the treatment form (spray booklet) of the grower/supplier. All agents must be included on the list of pesticides used by the grower/supplier.

**Plot**
Homogeneous production unit, which can consist of several sections. A piece of and/or a part of a greenhouse where the grower cultivates the same crop for a given period, using the same fertiliser, pesticide, phytosanitary treatment (product, date, dosage,
technique and material), using the same water for irrigation and applying the same methods to work the land.

**Post-harvest products**
Phytosanitary products used after the crop has been harvested in order to keep the product in good condition and to prevent rot (including waxing).

**PPP list = PPUL list = pesticide list**
A list of all substances allowed by the EU for the treatment of a specific type of crop. Growers/suppliers can prepare their own list showing all of the products that they use.

**Producer = grower**
The company responsible for the cultivation of products. The company is in possession of a GlobalGAP certificate.

**Residue**
Active substance in chemical treatments that remain in the fresh product, on the peel or on the exterior of the product after harvest. If the residue quantity exceeds the MRL the fresh product does not meet the legal requirements and it must not be delivered to any customer. It needs to be destroyed.

**Risk analysis**
A method used to determine the probability, frequency and severity of a risk. The results of the risk analysis is the reason for the control measures.

**Service provider**
Business partner of Albert Heijn.

**Spray Method**
The method used by a grower to administer growth regulators, herbicides, pesticides, fungicides and fertilisers to crops (sprayers, foggers, aeroplane spraying etc.).

**Traceability**
The ability to trace the history and location of a food product based on an identification contained in documents from the field to the consumer and vice versa in order to verify and completely map the process. The 'mass balance' (see definition above) is part of the traceability system.

**Tracking & tracing**
The process of tracking a product from the beginning to end of the production and logistics chain and vice versa.

**Uncertain results**
Margin of error of measurement. According to the current multi-residue analysis techniques, an error rate of +/- 50% can be expected.
Appendix 2  Checklist for growers/producers

1. Is the producer informed by the supplier about the requirements of Albert Heijn regarding pesticide residues?
   Documentation on the farm is available which demonstrates implementation of procedures that control compliance with the requirements of Albert Heijn on pesticide residues.

2. Are all products that are delivered to Albert Heijn certified according to Global GAP and the AH protocol?
   Documentation is available which show that all production stated for Albert Heijn is produced according to Global GAP and the Albert Heijn protocol. Products acquired through Parallel Ownership or products grown under Parallel Production are not permitted to be delivered to Albert Heijn.

3. Has the MRL risk assessment of the supplier been carried out in compliance with the requirements of the Albert Heijn Protocol?
   The risk assessment on MRL has been carried out in compliance with the requirements of Albert Heijn. If applicable, the control measures are implemented and up to date.

4. Has all relevant information from all plots, which are used for Albert Heijn, been communicated to the supplier?
   The producer has sent all relevant plot information to the supplier.

5. In case the requirements of Albert Heijn on pesticide residues are not met, the procedures are followed and corrective action plan is made and implemented.
   Documentation is available which proves the communication of supplier and service provider, if the requirements of Albert Heijn are not met. The corrective action plan is available and the corrective measures in the action plan are implemented.

6. In case of an increased risk of residue exceedance, the procedures are followed.
   In case of an increased risk of 50% exceedance, the producer has informed the supplier about this situation. The producer and supplier will take appropriate measures to make sure that deliveries to Albert Heijn will not exceed Albert Heijn's standards.
Appendix 3  

Explanation of residue standards (EU-MRL and ArFD-NL)

**Residue**

There are 2 standards in place in Europe in the field of pesticides:

- The standard related to agricultural use (MRL).
- The standard related to food safety (ARfD).

The European Commission (EC) determines the MRL values for pesticides per substance-food combination. The level of the MRL is determined by the maximum expected residue in primary agricultural products when an agent is applied in accordance with 'good agricultural use'. The MRL standard is determined for all of Europe, which is the reason why the EU MRL designation is used.

The ARfD concept was developed in the early 90's by the WHO/JMPR following the assessment of pesticides. It was found that a single consumption of certain crops showed relatively high residue levels, that could occasionally lead to acute problems. With average consumption calculations these acute problems will go unnoticed. In order to assess this, the ARfD concept was devised. The ARfD is dependent on a number of local factors (e.g. consumption patterns). For this reason the ARfD can vary between different countries in the EU. When the ARfD is followed by a country code (e.g. NL) the ARfD for that particular country applies.

The two regulations are not necessarily aligned with each other. It could therefore happen that the EU MRL of a substance-food combination is higher than the ARfD.

A sample calculation is given below

*The EU-MRL for lambda-cyhalothrin in endive 1 mg/kg.*

*The ARfD-NL for lambda-cyhalothrin in endive 0.11 mg/kg.*

*If a lot of endive contains 1 mg/kg lambda-cyhalothrin, it meets the EU MRL (100%) but exceeds the ARfD (90%).*

*In this case the standard for lambda-cyhalothrin at Albert Heijn is 0.11 mg/kg. Any value above this standard will lead to rejection of the product.*

*Albert Heijn strives to a value of 0.055 mg/kg lambda-cyhalothrin in endive.*

*The supplier will inform the service provider of anything above this target value.*

The current EU MRLs can be found at [http://ec.europa.eu/sanco_pesticides/public/index.cfm](http://ec.europa.eu/sanco_pesticides/public/index.cfm)

The current ARfD-EN standards will be provided in the risk assessment.
Appendix 4  Cost of the Albert Heijn protocol

Certain costs are related to the Albert Heijn protocol. The main cost items in the Albert Heijn Protocol include:

- **Certification costs**
  - Maintenance of the Food Plus database (through a fixed charge).
  - Execution and implementation of audit inspections by certification institutions.

Costs related to certification are borne by each individual producer or group of producers that participate in Albert Heijn Protocol.

- **Costs for independent sampling and analysis.**
Costs related to independent sampling and analysis are reimbursed by the supplier. The institution that takes the samples and/or does the analysis will charge for their expenses.
Appendix 5  Contact details of service providers

**Agarica B.V.**
A.G. Bellstraat 17
7903 AD Hoogeveen
Warmolt de Boer
Tel. (+31) 0528 263 909
Mob. (+31) 06 53 58 26 65
warmolt.boer@agarica.nl
www.agarica.nl

**Vezet B.V.**
P.O. Box 14
1749 ZG Warmenhuizen
Els Cornelissen
Tel. (+31) 0226 396 000
els.cornelissen@vezet.nl
www.vezet.nl

**Bakker Barendrecht B.V.**
P.O. Box 1164
2990 CA Barendrecht
Rob Wessels
Tel. (+31) 0180 695 262
ahprotocol@bakkerbarendrecht.nl
www.bakkerbarendrecht.nl

**Vogelaar Vredehof B.V.**
Oude Rijksweg 13
4413 NA Krabbendijke
Marco Kosten
Tel. (+31) 0113 397 121
marco@vogelaar.com
www.vogelaar.com

**Banken Champignons**
P.O. Box 261
6660 AG Elst (GLD)
Julian van Heumen
Tel. (+31) 0114 383 828
d.van.damme@labzvl.nl
www.bankenchampignons.com

**Laboratorium Zeeuw-Vlaanderen**
Zandbergsestraat 1
4569 TC Graauw
Daphne van Damme
Tel. (+31) 0481 367 183
d.van.damme@labzvl.nl
www.labzvl.nl

**Food Experts**
Tel. (+34) 915 773 728
info@food-experts.com

**Leo de Kock & Zn B.V.**
P.O. Box 417
1440 AK Purmerend
Claris ten Apel
Tel. (+31) 0299 420 975
Mob. (+31) 06 22 20 20 73
claris@leodekock.nl
www.leodekock.nl

**Nedato B.V.**
P.O. Box 1518
3260 BA Oud-Beijerland
Jan Moerland
Tel. (+31) 0186 645 943
moerland@nedato.nl
www.nedato.nl