



Qualitätssicherung. Vom Landwirt bis zur Ladentheke.

Guideline **Wholesale Fruit, Vegetables, Potatoes**





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1 Fundamentals

You will find basic information on the QS scheme, such as organisation, terms of participation, use of the QS certification mark and sanction procedures in the **Guideline General Regulations**.

1.1 Scope

- Wholesale fruit, vegetables, potatoes with fresh, prepared and processed goods
 - Wholesale Fruit, Vegetables, Potatoes (with product handling e.g. storing, treatment, marketing, transporting; applies also to service providers with product handling): all requirements need to be met
 - Agencies Fruit, Vegetables, Potatoes (definition see 6.3 Terms and Definitions): only the requirements which are marked with an "A" behind the headline need to be met.

1.2 Responsibilities

Scheme participants are responsible for:

- Compliance with requirements
- Full and correct documentation
- Self-assessment
- Correct and timely implementation of corrective actions
- Correct use of the QS certification mark and labelling of products

They must comply at all times with the requirements of the QS scheme and always be in a position to demonstrate compliance with said QS requirements. They must ensure that, in addition to the requirements of this guideline and other applicable QS requirements (for example: general regulations, guideline certification, guideline residue monitoring), the legal provisions that apply in the country in which the products were produced as well as the country in which they are marketed by the scheme participant are fulfilled.

2 General Requirements

2.1 General Scheme Requirements

2.1.1 General Business Data (A)

A company overview has to be compiled containing the following master data:

- Address of main company and each production site
- Legal form of company
- Contact person and legal representative
- Current address
- Telephone and fax number
- E-mail address
- QS-ID
- Type of company and location number
- Details on production scopes (first-line-merchant, trading partner)
- Details of crisis management (amongst others naming of crisis manager)


The scheme participant is responsible for entering these master data into the database and keeping them up to date.

Furthermore the following information needs to be included in the company overview:

- Details of existing systems for quality management and self-assessment (e.g. ISO 9001, IFS, BRC)
- Details on entrusted laboratories (address, telephone and fax number, e-mail address)



Existing documents can be used (e. g. QM or HACCP). The company overview must remain on the company premises.

 Company Overview

2.1.2 Use of the QS Certification Mark (A)

Scheme participants are entitled to use the QS certification mark once they have been permitted to do so within the framework of a QS system contract. The QS certification mark can only be used in accordance with the stipulations in the **style guide (appendix 5.3 in the Guideline General Regulations)**.

Scheme participants may only deliver goods with the QS certification mark on the label or on the packaging, if they themselves as well as the recipient/reseller of the goods are indicated in the QS database as QS scheme participants with eligibility of delivery. Goods labelled with the QS certification mark must be labelled in the delivery notes in accordance with requirement 3.6.6. In justified individual cases it may be deviated from this if it can be expected that the reseller will no longer actively advertise and/or market said products as QS produce in its own business transactions and customer contacts. Then, in the accompanying papers the products must not be described as QS.

Goods from producers with a GLOBALG.A.P. option 2 certificate or a GLOBALG.A.P. option 1 multisite with QMS certificate can only be labelled with the QS certification mark, if the producers are authorized for the usage of the certification mark. Producers who are not authorized for the usage of the certification mark on goods are marked in the QS database.

2.1.3 Incident and Crisis Management (A)


QS has built up a comprehensive crisis management system which provides the scheme participants with active support in the event of an incident or crisis. The scheme participants must immediately inform QS and – if a legal obligation exists – the appropriate authorities about system-relevant critical events and public product recalls.

Critical events are system-relevant events that represent a hazard to humans, ecology, financial values or the QS scheme in its entirety or that can become a hazard to it. In particular, the scheme participants must inform QS in cases in which:

- nonconformities occur in the procurement of goods, or in production or marketing that might pose a risk to food safety
- preliminary proceedings are initiated due to violation of regulations to secure food safety
- media research, critical media reports and public protests are carried out that are performed directly or indirectly due to questions of food safety.

Every scheme participant must keep a paper of incident close at hand in order to pass on all of the required information to specified recipients without delay in the event of an incident. In addition to this, every scheme participant must nominate a responsible person who can also be reached outside regular working hours. The crisis adviser must be entered in the QS database.

A procedure on what to do in the event of an incident or crisis must be defined and introduced and verified at regular intervals, but at least once a year (approximately every 12 months). The following points must be included therein: set-up of a crisis committee, emergency phone number list, procedure for product recall and acceptance, communication plan, customer information.

 Paper of incident, incident and crisis management procedure

2.1.4 Handling of Documents (A)

Each company must have a procedure that enforces and describes the filing and recording of relevant documents. All records must be detailed and complete.



Documents and records relating to internal checks carried out as part of the self-assessment system must be saved within the QS scheme for at least 2 years in accordance with the legal regulations in the interests of due diligence and the obligation to produce supporting documents for third parties.

2.1.5 Company Premises and Access Regulations

All buildings and operational facilities must be protected against unauthorised access and, where possible, locked. Access regulations must be in place. Unauthorised persons are forbidden from entering operational rooms where food is stored.

All persons who do not belong to the company may only enter work rooms when accompanied by or with the consent of an authorised person and must receive instructions before entering work rooms.

If third party vehicles are driving in the company grounds (e.g. vegetable delivery trucks or waste disposal vehicles), possible hazards posed by these vehicles must be considered and assessed within the scope of risk analysis.

2.1.6 Monitoring of Test Equipment

For the control and monitoring of the devices and systems used as measuring devices (e.g. thermometer) it needs to be complied with the intervals given by the manufacturer.

If there are no manufacturers specifications given, the measuring devices have to be calibrated or checked in line with the personal estimation of the risk but at least once a year (approx. every 12 months).

If a calibration is not possible for certain measuring devices, these measuring devices must be serviced and maintained regularly. The measuring method of the various measuring devices has to be considered. The calibration procedure is described for each measuring device.

The calibration results for the test equipment used must be documented (including deviations, corrective measures) and clearly linked to the equipment. The measuring accuracy, reliability and readiness of the operational measuring equipment must be assured. Scales used for controlling filling weight must be calibrated.

Applicable documents are **Law governing the measuring and calibration system (Calibration Law)**



Calibration documentation

2.1.7 [K.O.] Realisation of Self-Assessments (A)

Compliance with the QS requirements must be checked. The regular conducting of self-assessments must be documented per checklist at least once a year. Existing assessment and documentation systems which guarantee that the QS requirements are fulfilled can also be used.

The internal checks can be documented through automatic registration processes (e. g. automatic temperature recordings), as well as by means of manual recordings (e. g. incoming goods inspection).

It is at the discretion of the company whether or not to grant the necessary authorisation/qualification to external companies.



Checklist for Self-Assessment

2.1.8 Fulfilment of the Initiated Measures in the Event of Deviations (A)

Any deviations detected during internal checks must be corrected as quickly as possible. Deadlines must be set for this purpose.



2.2 HACCP

2.2.1 [K.O.] HACCP-Concept (A)

To ensure the necessary food safety, the company must prepare, apply and maintain a hazard control system in accordance with the HACCP principles (**Codex Alimentarius**).

When building up a HACCP-concept, it must be ensured that it is possible for third parties to follow the reasoning behind it.

2.2.2 HACCP-Team

The headship has to appoint a HACCP team which is responsible for the implementation and maintenance of the HACCP concept. It needs to be proven that the HACCP team is sufficiently experienced regarding all areas of the company.

If there are several HACCP teams, a coordinator must be appointed who is responsible for the systematic work of the HACCP team.

2.2.3 Product Description

A complete product/article group description must be created. Those product descriptions have to contain all relevant information for hazard analysis and the definition of critical control points.

2.2.4 Flow Diagrams (A)

A flow diagram which contains a depiction of the entire production process must be created.

2.2.5 Risk Analysis (A)

The HACCP concept is based on the determination of risks, which then have to be avoided eliminated or reduced to an acceptable level.

2.2.6 Critical Control Points (CCP)

Determination of critical control points on the process stage(s) on which control is necessary in order to avoid or eliminate any existent risks or reduce them to an acceptable level.

2.2.7 Limit Values for CCP

Establishment of limit values for these critical control points on the basis of which a difference can be made between acceptable and unacceptable values with regard to the avoidance, elimination or reduction of determined risks.

2.2.8 Monitoring and Verification of Limit Values for CCP

Determination and implementation of efficient methods for the monitoring of critical control points. As well as establishment of verification methods to determine whether the measures named in the HACCP principles function completely and effectively. The verification methods are applied regularly.

2.2.9 Corrective Actions for CCP

Determination of corrective actions in the event that monitoring shows that a critical control point is not under control.

2.2.10 Responsibilities

Responsibilities must be clearly described in an organigram.

2.2.11 Records

Preparation of documents and records appropriate to the type and size of the company in order to prove that the measures named in the HACCP principles have been applied.

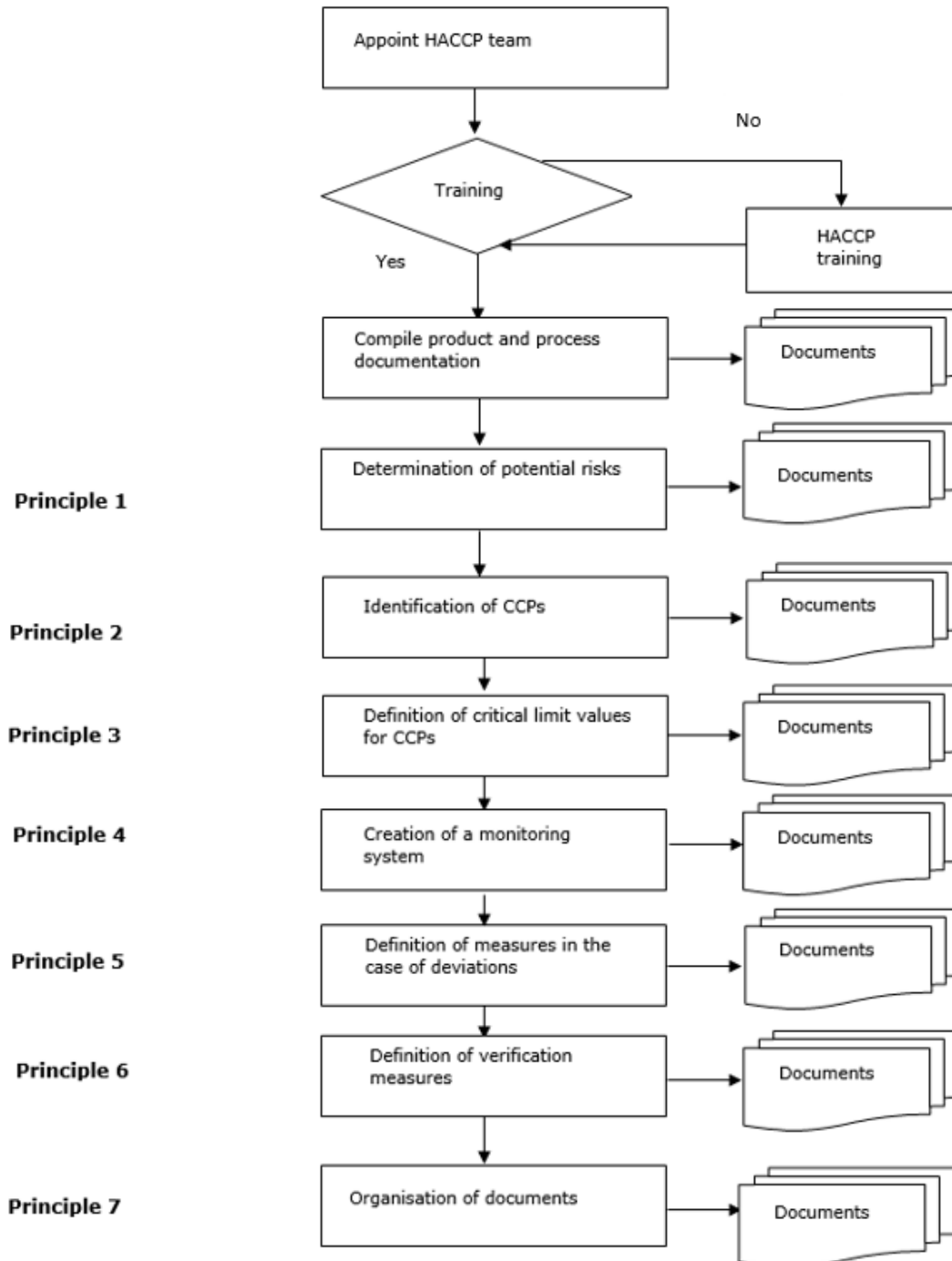


2.2.12 HACCP Verification (A)

The HACCP system and its implementation must be reviewed once a year (validation). If changes are made to the handling of products or finished goods, or to an HACCP-relevant manufacturing process, production, processing, storage or marketing stage, the company must review the HACCP concept and alter it as necessary.

Self-Assessment Records, Checklist

Figure 1: Exemplary Preparation of an HACCP Study





2.3 Good Hygiene Practice

2.3.1 Water Quality

Must be made available in sufficient quantities and may not pose any risk of contamination. A filling tap plan must be present in the company. Water, regardless of its origin or aggregate state, which is used for the production and/or treatment of food and for the cleaning of plant and equipment which have contact with food, must be proven to comply with the following *microbiologic parameters*:

- Escherichia coli (E. coli) 0 CFU / 100 ml
- Enterococci 0 CFU / 100 ml

Compliance with the microbiological parameters must be demonstrated by at least annual analyses. Samples must be taken from the extraction point.

- In addition, compliance with the following *chemical parameters* is also to be ensured:
- Arsenic 0.01 mg / l
- Cadmium 0.003 mg / l
- Lead 10 µg / l

Compliance with chemical parameters must be verified at least annually based on own analysis or based on the analysis results of the water supplier.

Sampling must be carried out by a qualified sampler according to a risk-based plan. For the analysis of the water, only laboratories accredited for drinking water analysis may be commissioned.

If the water complies with the specifications of the German **Drinking Water Regulation 2001 (TrinkwV 2001)** in its current version and/or European **Directive 98/83/EC on the quality of water for human consumption**, the above-listed requirements have been met.

- Process/Washing water

Must be replaced and/or, where necessary, treated at regular intervals based on a risk analysis. The contamination risk must be kept as low as possible.



Control plan of water quality

2.3.2 Cleaning and Disinfection

Hygiene checklists/cleaning and disinfection plans need to be available for all relevant operational places and need to be communicated to the staff by notices. The following information needs to be included in the documents:

- Responsibilities
- Products used and their implementation provisions
- Areas which need to be cleaned and disinfected
- Cleaning intervals
- Record keeping requirements
- Hazard symbols (if necessary)

The implementation of the requirements on this hygiene checklist must be assessed regularly (at least once a year). The results of these assessments must be documented and readily available.

The use of disinfectants to disinfect hands has to be based on the current disinfectant list of the **Association for Applied Hygiene (VAH)** or other comparable national guidelines. The use of disinfectants to disinfect the plant, installations and equipment must be based on the disinfectant list of the **German Association of Veterinary Medicine (DVG)** or other comparable national guidelines.



Cleaning plans, Disinfection plans, Hygiene Checklist, implementation review results
Hygiene checklist, disinfectants used in operations



2.3.3 Pest Monitoring and Control


It must be ensured that a high level of cleanliness and hygiene is maintained in all work/storage areas in order to prevent the attraction of pests and vermin. In the operating rooms, precautionary measures must be taken to repel pests that adversely affect food. Appropriate measures for pest monitoring or, if necessary, for pest control must be introduced.

Within the implementation of pest monitoring and control, measures and qualifications of the user must comply with the legal requirements of the country as well as the particular product specifications. Monitoring and bait points need to be controlled at least every month as long as no other control interval is determined on the basis of a risk assessment. In order to guarantee the safety of the food as well as that of the employees, suitable pest control methods and pesticides must be used. This pest control treatment must not jeopardise the safety of the produced or stored products.

A permanent baiting (without infestation) with rodenticides is only permissible in exceptional cases, if the implementation takes place strategically via a professional and qualified pest controller who meets the legal requirements of the appropriate country. The exceptional case needs to be proven and documented by an annual risk analysis and risk assessment of the pest controller. Only baits that are approved for this purpose may be used.

The documentation must contain at least the following information:

- Information on used products for pest prevention and control
- Date of treatment as well as the specification of the applied quantities
- Proof that the employees involved in pest control are suitably qualified (expertise required for the respective task)
- Checkpoint plans showing the positioning of monitor- and bait stations (also for temporary checkpoints)
- Records of pests found (findings)
- Measure plans in case of pest infestation

 Documentation on Pest Control, Pest Control Plan, if applicable Evidence of qualification, if applicable contract with specialist company

2.3.4 Foreign Substance Management

The infiltration of foreign substances into food must be prevented. By implementing risk analyses, hazards and possible sources of foreign substances can be identified and assessed. Corresponding precautionary measures and procedures must be implemented to minimise the risk.

 Documentation Foreign Substance Management

2.3.5 **[K.O.] Risk of Contamination**

Contaminations need to be avoided. For this purpose a risk-based management needs to be carried out, in which diverse sources of contamination like food waste need to be taken into account.

2.4 Staff Hygiene

2.4.1 General Rules of Conduct

There must be documented guidelines for staff hygiene. At least the following points must be taken into consideration:

- Cleaning and disinfecting of hands
- Eating, drinking, smoking, chewing gum
- Dealing with skin injuries (cuts, scrapes)
- Finger nails, jewellery, piercings, watches
- Hair, beards



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Smoking is prohibited during working hours and in working areas and only allowed in areas and rooms which are designated for that purpose. Clearly visible "no-smoking" signs must be hung up in the rooms.

Wherever necessary, sufficient quantities of protective clothing and headgear must be made available to all employees. Sufficient facilities for hand hygiene must be provided. The facilities for hand hygiene must fulfil at least the following requirements:


- Running cold and hot water
- Liquid soap in dispensers (not in e.g. bottles)
- Suitable hand drying facilities

All persons (employees, contractors, etc.) must adhere to the staff hygiene guidelines. There must be a procedure in the company which assesses the consistent implementation of personal hygiene procedures. Anyone whose work has an influence on the safety of products must have the necessary experience or training.

 Rules of Conduct

2.4.2 Staff Rooms

The company must provide changing rooms for employees and visitors to the company. Outdoor clothing and protective clothing must be kept separately where necessary. Staff rooms, including break rooms, must always be kept in a clean condition. The rooms must be cleaned on a regular basis. This cleaning must be documented.

 Documentation of cleaning

2.5 Training of Staff

2.5.1 [K.O.] Hygiene Training

Hygiene training must be conducted on the premises once a year (approx. every 12 months) on the basis of **REG (EC) No. 852/2004**. Documented training programmes must be defined in line with product requirements and staff training needs. This training plan contains all rules of conduct (⇒ 2.4.1 General Rules of Conduct) as well as:

- Contents
- Training intervals
- Participants
- Languages
- Instructor

 Training Programme and Training Certificates, Smoking Ban – Proof of Informing Staff

2.5.2 Information on the QS Scheme (A)

The responsible staff must be informed annually about the requirements contained in the QS scheme manual. As well as the QS scheme basic principles this includes, most importantly, the specific QS requirements which are valid for the relevant employee's area of responsibility. Handling the QS certification mark must also be part of the information. This includes:

- The proper use of the QS certification mark according to the style guide
- Inspecting the use of the certification mark on incoming goods
- How to react to detected deviations



2.5.3 General Training (A)

Employees are expected to participate annually in internal/external seminars that are organised to provide them with more information or further education and that are recorded in the company documents. These include seminars amongst others on the topics:

- Commodities science and labelling
- Quality standards/marketing standards inclusive **General** and **specific marketing standards** in accordance with **Regulation (EC) No. 543 /2011** respectively **UNECE standards for fruit and vegetables**
- Disease and pest infestation of products
- Transport and packaging
- Safety at work

All personnel must to be trained at the beginning of their job and annually repeated on the tasks that must be taken in the company. The training sessions must be structured according to the education and function within the company of the person who is receiving the training. The name of the person who provided the training, date of training, names of participants, topic and, if applicable, any training material that was used or handed out must be recorded.

 Training Programme, Evidence of Training

3 Process-Specific Requirements

3.1 Incoming Goods

3.1.1 Technical/Structural Condition

Work areas and rooms in which food is handled must be, in accordance with **Regulation (EC) No. 852/2004 Appendix II** clean and properly maintained at all times. They must be planned, designed, built and proportioned in such a way that the necessary level of cleaning and/or disinfection is possible and contamination is avoided or reduced to a minimum level.

The following requirements must be met:

- Floor coverings must be kept in very good condition and must be easy to clean and disinfect when necessary.
- Wall surfaces must be kept in very good condition and must be easy to clean and disinfect when necessary.
- Ceilings (or roof interiors where there are no ceilings) and ceiling structures must be built and finished in such a way that the accumulation of dirt is avoided and condensation, undesired mould infestation and the flaking of material particles is kept to a minimum.
- Windows and other openings must be built in such a way that the accumulation of dirt is avoided. If they can be opened to the outside, they must be fitted where necessary with insect screens, which must be easy to remove for cleaning purposes.
- Doors must be easy to clean and disinfect when necessary. They must have a smooth, water-repellent surface.
- Surfaces (including surfaces of equipment) that come into contact with food, must be kept in very good condition and must be easy to clean as well as disinfect when necessary. They must be made of a smooth, abrasion-proof, corrosion-proof, non-toxic material.

Work rooms and plant must be kept in an appropriate condition and must be maintained in accordance to written instructions. Maintenance work must be carried out in a hygienic and controlled manner and must not jeopardise the safety of food. All material that is used for maintenance and repair work needs to be suitable for the purpose.




The maintenance programme has to include at least the following elements:

- Transport systems (where present)
- Responsible employees (own employees or those from external companies)
- Frequency

Operating premises and facilities must be kept in a good condition and have to be maintained following written instructions.


The incoming goods area must be designed in such a way as to allow for access restrictions and restrictions on external persons or visitors entering the company. A separate entrance must be made available to staff.

 Documentation of the maintenance

3.1.2 Room, Equipment and Plant Hygiene

All rooms, plant and machinery must be in a clean and hygienic condition. The accumulation of water in unused spaces must be avoided and there may be no large corrosion areas on plant and machinery. The transport containers and vehicles must be kept hygienically clean. Rooms must be protected against pest infestation by installing tightly sealed gates and doors. Areas for storing pallets and barrels need to be cleaned on a regular basis.

Storage, preparation and operating rooms must be cleaned regularly corresponding the cleaning plan. This applies especially to the floor covering. The frequency of cleaning is based on the work rhythm/restocking in the operating rooms/storage rooms.

 Cleaning plans, Disinfection plans, Hygiene Checklist, Assessment Results for the Implementation of Requirements

3.1.3 Ground Clearance

Products are not allowed to come into direct contact with the floor/ground. Containers for storing products are not allowed to be placed directly onto the ground. They must always be stored on pallets or mobile base with wheels.

Potatoes and Onions

Unpacked potatoes and onions can be stored directly on the ground or on the appropriate equipment if the soil or material on which they are stored is in a clean and hygienic condition.

3.1.4 Order and Organisation

The receiving department must follow a structured series of procedures. The allocation of positions must clearly follow from the work process and possible food safety hazards must be prevented. Pathways for goods must be optimised accordingly so that there is no cross-contamination. Goods that need to be cooled must be taken to the cold stores without delay (if the goods are not handled directly) or necessary measures must be taken to ensure compliance with the cold chain.

3.1.5 Transport Vehicle Delivery

Delivery vehicles must be kept in a hygienic and tidy condition and show no signs of residual dirt. The driver and anybody accompanying the driver must be wearing appropriate clean clothing. Goods must not be harmed by clothing or handling.


The goods to be transported must be loaded in a perfectly clean condition and show no signs of coarse dirt. The temperature of goods must be in accordance with the legal requirements or product specifications and must be documented.

 Temperature Checklists



3.1.6 Incoming Goods Inspection

Inspections of incoming goods must be carried out according to a regulated process on the basis of internal guidelines. These incoming goods inspections must be recorded. They must comprise all relevant products. If necessary, incoming goods inspections must be adapted to suit changed manufacturing, storage or transport conditions.

 Incoming Goods Inspection


3.1.7 [K.O.] Labelling of purchased QS Goods (A)

All QS goods must be clearly marked as QS goods. This applies to any accompanying documentation (usually delivery notes or EDI shipping notifications) so that QS goods can easily be matched with the corresponding delivery note and other accompanying documentation at all times.

All accompanying documentation must be marked, regardless of whether or not a product has been awarded a QS certification mark (\Rightarrow 2.1.2. Use of the QS certification mark). QS goods must always be marked as QS goods on the accompanying documentation (e.g. apples (QS) or QS apples). This also applies to goods that have been delivered to the QS scheme under QS recognised standards (e.g. Vegaplan, GLOBALG.A.P.).

For labelling of QS goods customers and suppliers can alternatively agree upon general regulations or use synonyms which replace the designation „QS“ (e. g. the designation „Origin Germany“ replaces the designation „Apple (QS)“ on the delivery notes). The procedure must be documented in the quality management manual or in a work instruction, must be known by the respective staff members and the supplier/recipient of the goods and must be comprehensible in the audit.

The procedure for labelling QS goods must be laid out and known by all responsible employees who work the products, even if no QS goods are traded.


 Proof QS goods (e.g. delivery notes etc.)

3.1.8 [K.O.] Product Temperature

The prescribed temperatures must be maintained and can only be deviated from for short periods when this becomes necessary for practical reasons (e.g. when loading and unloading and during conveyance to the workplace).

The prescribed product temperature of fruit and vegetable items (e.g. processed products) that are required to be refrigerated must not be exceeded. Product-specific regulated temperature ranges have to be met. If lower temperatures are set by the company (internal guideline) and agreed to by the supplier (e.g. in specifications), the products must be kept at these temperatures and this must be taken into consideration when incoming goods arrive.

The temperatures have to be controlled and documented.

 Temperature documents, checklist for incoming goods

3.1.9 Returns Management (A)

A system for processing returns must be established. All returned goods must be recorded and evaluated. The decision processes which are relevant for the subsequent use of the returned goods need to be followed. Appropriate measures to prevent the recurrence of discrepancies must be introduced. The separation of QS goods and non-QS goods must be taken into consideration.



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3.1.10 Complaints Management (A)

A system for managing product claims and product complaints must be in place. All claims/complaints must be assessed and where necessary appropriate measures must be taken.

- Claims = made by authorities
- Complaints = made by costumers and end-users

3.1.11 Quality Requirements

By means of random samples, goods must be visually inspected for defects. Delivered goods must also be checked for pest infestation and if necessary, appropriate measures must be introduced. The results of these goods inspections must be documented.

Random samples must be taken with regard to compliance with relevant marketing standards or the valid legal grades if there are any. The **General marketing standard** and **specific marketing standard** in accordance with **Regulation (EC) No. 543 /2011** respectively **UNECE standards for fruit and vegetables** need to be taken in consideration.

This includes testing the

- minimum requirements: appearance, smell, degree of ripeness
- special requirements set out by standards
- e.g. brix content of certain table grapes
- declaration of weight for already packed produce
- quality requirements
- size grading
- tolerances in respect of quality and size
- uniformity
- packaging

Random samples must be taken to test the completeness of the product by weighing, counting and measuring. If necessary, the random sample may have to be adjusted in proportion to the specific product or country.

The date of shipment, size and number of packaging units/parcels, if necessary, allocation to means of transport, means of transport (flight number, name of ship, registration number of truck) / the expected time of arrival of the goods.


Potatoes

A representative sample must be taken from potatoes before or during storage and after long-term storage. The sample must be examined and documented in accordance with the **RUCIP requirements** and, in Germany, in line with the regulation on legal grading for food potatoes, the **Berlin Agreement** and the **guideline for quality control of potatoes for consumption**.

 Checklist for Incoming Goods / Visual Rating Protocols/Analysis Protocols

3.1.12 Hygiene Requirements

The condition of goods will be examined with a view towards damages to products and perceptible negative influences. Rejected goods must be separated or, if necessary, discarded. (Sample test for spoilage or deterioration caused by decay or mould growth, dirt and foreign matters, strong smelling contaminants, disease or pest infestation).

 Checklist for incoming goods



3.1.13 Product Labelling (A)

The compliance with the European and national regulations and laws on the marking and labelling (e.g. the **general marketing standard, special marketing norm** in accordance with **Regulation (EC) No. 543 /2011** and any **UNECE standards** which may have been used) for both fresh and processed fruit and vegetables have to be checked.

This applies to:

- Packing units (boxes, reusable crates)
- Sales packaging
- Shipping documents/delivery bills/labels

In the case of bulk fruit, vegetables and loose food potatoes, this information needs to be shown on the transport packaging (cardboard/crate/reusable box).

Further applicable documents are **Pre-packaging regulation (FertigPackV), Food Information Regulation (LMIV), Batch marking and labelling regulation (LKV), Price indication regulation (PAngV), Additive approval regulation (ZZuIV), RUCIP requirements** and the German **“Berlin Agreement” terms and conditions of business.**

3.1.14 Labelling of QS goods with an identification number (A)

QS goods must be labelled with the OGK-number or another in the QS-database deposited identification number of the producer (e.g. GLOBALG.A.P.-Number (GGN) or Global Location Number (GLN)) in the delivery notes / accompanying documents or on the label of the goods (or box label).

In the case of batches which may contain goods from several producers due to mixing as a result of bulk goods storage or technical packaging or treatment processes (e.g. sorting system) and in the case of packed goods which contain goods from several producers, the QS-ID, the GH-number or another in the QS-database deposited identification number (e.g. the GGN, GLN) of the packing location can be used alternatively.

3.2 Storage

3.2.1 Technical/Structural Condition

Storage rooms in which food is handled must be in accordance with **Regulation (EC) No. 852/2004 Appendix II**, clean and properly maintained at all times. They must also be planned, designed, built and proportioned in such a way that the necessary level of cleaning and/or disinfection is possible and contamination is avoided or reduced to a minimum.

The following requirements must be met:

- Floor coverings must be kept in very good condition and must be easy to clean and disinfect when necessary.
- Wall surfaces must be kept in very good condition and must be easy to clean and disinfect when necessary.
- Ceilings (or roof interiors where there are no ceilings) and ceiling structures must be built and finished in such a way that the accumulation of dirt is avoided and condensation, undesired mould infestation and the flaking of material particles is kept to a minimum.
- Windows and other openings must be built in such a way that the accumulation of dirt is avoided. If they can be opened to the outside, they must be fitted where necessary with insect screens, which must be easy to remove for cleaning purposes.
- Doors must be easy to clean and disinfect when necessary. They must have a smooth, water-repellent surface.
- Surfaces (including surfaces of equipment) that come into contact with food, must be kept in very good condition and must be easy to clean as well as disinfect when necessary. They must be made of a smooth, abrasion-proof, corrosion-proof, non-toxic material.




Work rooms and plant must be kept in an appropriate condition and must be maintained in accordance with written instructions. Maintenance work must be carried out in a hygienic and controlled manner and must not jeopardise the safety of food. All material that is used for maintenance and repair work needs to be suitable for the purpose.

The maintenance programme has to include at least the following elements:

- Transport systems (where present)
- Responsible employees (own employees or those from external companies)
- Frequency


Operating premises and facilities must be kept in a good condition and have to be maintained following written instructions.

 Documentation of the maintenance

3.2.2 Room, Equipment and Plant Hygiene

All rooms, plant and machinery must be in a clean and hygienic condition. The accumulation of water in unused spaces must be avoided and there may be no large corrosion areas on plant and machinery. The transport containers and vehicles must be kept hygienically clean. Rooms must be protected against pest infestation by installing tightly sealed gates and doors. Areas for storing pallets and barrels need to be cleaned on a regular basis.

Storage, preparation and operating rooms must be cleaned regularly corresponding the cleaning plan. This applies especially to the floor covering (fruit and vegetables according to the requirement of a wet cleaning). The frequency of cleaning is based on the work rhythm/restocking in the operating rooms/storage rooms.

 Cleaning plans, Disinfection plans, Hygiene Checklist, Assessment Results for the Implementation of Requirements

3.2.3 Ground Clearance

Products are not allowed to come into direct contact with the floor/ground. Containers for storing products are not allowed to be placed directly on to the ground. They must always be stored on pallets or mobile base with wheels, as otherwise there could be a risk of contamination from dirty floors when restacking.

Potatoes and onions

Unpacked potatoes and onions can be stored directly on the ground or on the appropriate equipment if the soil or material on which they are stored is in a clean and hygienic condition.

3.2.4 Stock Management

A feasible and comprehensible stock management system has to be in place, by means of which it can be quickly and unequivocally determined when which goods were stored. Each stored or temporarily kept product or packaging unit needs to be clearly identifiable. Storage conditions must not have any negative impact on product quality (packaged/unpackaged). A procedure which lays down the measures and steps to be taken in the case of a system failure or fault must be determined, and the relevant employees must be aware of the procedure. Furthermore there must be a procedure determined for the handling of blocked produce and goods that are not conform.

A batch-based storage system must be implemented. The batches must be labelled. The definition of a batch is a duty of stock management.

Mixing of varieties may not occur.



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The following information must be clearly documented using company records:

- Date of delivery
- Labelling of stores, boxes, and cases
- Supplier
- Type
- Quantity

 Documentation of Storage


3.2.5 Prerequisites for Maintaining Quality

Specific climatic conditions, such as temperature, humidity and other guidelines in accordance with the specifications for stored products, must be complied with in the rooms or fixtures where products or pieces of equipment are stored (particularly for potatoes, in the case of the rapid drying of moist tubers, wound healing, etc.). To avoid the occurrence of condensate, the changes in temperature need to be considered.

During storage, the state of the goods and the defined storage conditions must be regularly controlled and documented. Ethylene-sensitive fruit and vegetables (e.g. kiwis, cauliflower, Brussels sprouts, etc.) and potatoes must not be stored in close proximity to fruit and vegetables which produce a lot of ethylene (e.g. apples, nectarines, peaches, melons, etc.) in case of a longer storage.

Potatoes

When cold air is used in the storage of potatoes, the type-specific differences in the formation of reducing sugars need to be taken into account.

 Documentation of the Quality of Goods and Storage Conditions

3.3 Cold Storage Rooms

3.3.1 Technical/Structural Condition

Cold storage rooms in which food is handled must be, in accordance with **Regulation (EC) No. 852/2004 Appendix II**, clean and properly maintained at all times. They must also be planned, designed, built and proportioned in such a way that the necessary level of cleaning and/or disinfection is possible and contamination is avoided or reduced to a minimum.

The following requirements must be met:

- Floor coverings must be kept in very good condition and must be easy to clean and disinfect when necessary.
- Wall surfaces must be kept in very good condition and must be easy to clean and disinfect when necessary.
- Ceilings (or roof interiors where there are no ceilings) and ceiling structures must be built and finished in such a way that the accumulation of dirt is avoided and condensation, undesired mould infestation and the flaking of material particles is kept to a minimum.
- Windows and other openings must be built in such a way that the accumulation of dirt is avoided. If they can be opened to the outside, they must be fitted where necessary with insect screens, which must be easy to remove for cleaning purposes.
- Doors must be easy to clean and disinfect when necessary. They must have a smooth, water-repellent surface.
- Surfaces (including surfaces of equipment) that come into contact with food, must be kept in very good condition and must be easy to clean as well as disinfect when necessary. They must be made of a smooth, abrasion-proof, corrosion-proof, non-toxic material.

Work rooms and plants must be kept in an appropriate condition and must be maintained in accordance with written instructions. Maintenance work must be carried out in a hygienic and controlled manner and



must not jeopardise the safety of food. All material that is used for maintenance and repair work needs to be suitable for the purpose.

The maintenance programme has to include at least the following elements:

- Transport systems (where present)
- Responsible employees (own employees or those from external companies)
- Frequency

It must be proven by documentation of maintenance work that the requirements listed above are met.



Documentation of the Maintenance

3.3.2 Room, Equipment and Plant Hygiene

The cold-storage rooms must be in a clean and hygienic condition.

Mould growth in the cold-storage rooms must be avoided and, if necessary, steps to eliminate mould must be implemented. It is also important to ensure that ice formation is kept to a minimum. The refrigeration units need to be serviced regularly and be in a hygienically sound condition.

The accumulation of water in unused spaces must be avoided and there may be no large corrosion areas on plant and machinery. The transport containers and vehicles must be kept hygienically clean. Rooms must be protected against pest infestation by installing tightly sealed gates and doors. Areas for storing pallets and barrels need to be cleaned on a regular basis.

Storage, preparation and operating rooms must be cleaned regularly corresponding the cleaning plan. This applies especially to the floor covering (fruit and vegetables according to the requirement of a wet cleaning). The frequency of cleaning is based on the work rhythm/restocking in the operating rooms/storage rooms.



Cleaning plans, Disinfection plans, Hygiene Checklist, Assessment Results for the Implementation of Requirements

3.3.3 Ground Clearance

Products are not allowed to come into direct contact with the floor/ground. Containers for storing products are not allowed to be placed directly on to the ground. They must always be stored on pallets or mobile base with wheels.

Potatoes and onions

Unpacked potatoes and onions can be stored directly on the ground or on the appropriate equipment if the soil or material on which they are stored is in a clean and hygienic condition.

3.3.4 Stock Management

A feasible and comprehensible stock management system has to be in place, by means of which it can be quickly and unequivocally determined when which goods were stored. Each stored or temporarily kept product or packaging unit has to be clearly identifiable. Storage conditions must not have any negative impact on product quality (packaged/unpackaged). A procedure which lays down the measures and steps to be taken in the case of a system failure or fault must be determined, and the relevant employees must be aware of the procedure. Furthermore there must be a procedure determined for the handling of blocked produce and goods that are not conform.

A batch-based storage system must be implemented and labelled. The definition of a batch according to type, company and fields/acreages is a duty of stock management.

Mixing of varieties may not occur during the receipt and storage of goods.



The following information must be clearly documented using company records:

- Date of delivery
- Labelling of stores, boxes, and cases
- Supplier
- Type
- Quantity



Documentation of Storage

3.3.5 [K.O.] Temperature Recording and Monitoring

Temperature recording and monitoring must be regulated in such a way that all product temperature requirements are met (⇒ 3.1.8 Product temperature)

The operating temperature of any cooling equipment must be registered and documented. Furthermore, a procedure to be followed in the case of a technical fault must be laid down and acknowledged by the employees.

Potatoes

Separate records on climate control and climate development in the warehouse are necessary for potatoes. These records are to include

- Information on the changes in the temperature of the outside air
- Indoor air temperature
- Temperature of tubers
- Ventilation times
- Operation of ventilation equipment



Temperature and Climate Records, temperature checklist

3.3.6 Prerequisites for Maintaining Quality

Specific climatic conditions, such as temperature, humidity and other guidelines in accordance with the specifications for stored products, must be complied with in the rooms or fixtures where products or pieces of equipment are stored (particularly for potatoes, in the case of the rapid drying of moist tubers, wound healing, etc.). To avoid the occurrence of condensate, the changes in temperature need to be considered.

During storage, the state of the goods and the defined storage conditions must be regularly controlled and documented. Ethylene-sensitive fruit and vegetables (e.g. kiwis, cauliflower, Brussels sprouts, etc.) and potatoes must not be stored in close proximity to fruit and vegetables which produce a lot of ethylene (e.g. apples, nectarines, peaches, melons, etc.) in case of a longer storage.

Potatoes

When cold air is used in the storage of potatoes, the type-specific differences in the formation of reducing sugars need to be taken into account.



Documentation of the Quality of Goods and Storage Conditions

3.4 Treatment

3.4.1 Treatment and Sorting

During preparation and sorting, it is essential to continuously watch out for damages to goods or any packaging. Furthermore, the correct labelling of products must be monitored. It needs to be possible to identify QS produce non-ambiguously and to exclude a mix up.



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Furthermore, quality requirements in line with the marketing standards must be met and checked randomly (⇒ 3.1.11 Quality Requirements).

Water used for washing products may contain only those additives which have been approved for this purpose. The use of these additives is to be documented.

Potatoes

Before the end of the long-term storage of potatoes, a representative sample test must be carried out to determine internal and external tuber defects. Depending on the observed results, a decision is made about the further processing for preparation and marketing.

- Potatoes should leave storage only if the tuber is in a suitable condition.
- The potatoes to be marketed must comply with the current version of the **Berlin agreement**, if this is used.
- The results of the tuber rating and/or the laboratory analyses have to be recorded in the stock register and documented.


 Rating Log

3.4.2 [K.O.] Post-Harvest Treatments and Sprout Suppressants

Every post-harvest treatment and every use of agents for chemical sprout suppressants is to be documented including the following information:

- Batch number
- Date and place of usage
- Concentration
- Post-harvest handling agent or sprout suppressant.

In the case of post-harvest treatment or chemical sprout suppressants, only agents approved in the country of usage may be used. The legal requirements of each destination country must be complied with. This also applies to labelling on all packaging and shipping units.

 Record Application of Post-Harvest Handling Agents/Sprout Suppressant Agents

3.5 Packaging/Redistribution

3.5.1 Technical/Structural Condition

Packaging and redistribution rooms in which food is handled must be, in accordance with **Regulation (EC) No. 852/2004 Appendix II**, clean and properly maintained at all times. They must be planned, designed, built and proportioned in such a way that the necessary level of cleaning and/or disinfection is possible and contamination is avoided or reduced to a minimum.

The following requirements must be met:

- Floor coverings must be kept in very good condition and must be easy to clean and disinfect when necessary.
- Wall surfaces must be kept in very good condition and must be easy to clean and disinfect when necessary.
- Ceilings (or roof interiors where there are no ceilings) and ceiling structures must be built and finished in such a way that the accumulation of dirt is avoided and condensation, undesired mould infestation and the flaking of material particles is kept to a minimum.
- Windows and other openings must be built in such a way that the accumulation of dirt is avoided. If they can be opened to the outside, they must be fitted where necessary with insect screens, which must be easy to remove for cleaning purposes.



- Doors must be easy to clean and disinfect when necessary. They must have a smooth, water-repellent surface.
- Surfaces (including surfaces of equipment) that come into contact with food, must be kept in very good condition and must be easy to clean as well as disinfect when necessary. They must be made of a smooth, abrasion-proof, corrosion-proof, non-toxic material.

Work rooms and plant must be kept in an appropriate condition and must be maintained in accordance with written instructions. Maintenance work must be carried out in a hygienic and controlled manner and must not jeopardise the safety of food. All material that is used for maintenance and repair work needs to be suitable for the purpose.

The maintenance programme has to include at least the following elements:

- Transport systems (where present)
- Responsible employees (own employees or those from external companies)
- Frequency

Operating premises and facilities must be kept in a good condition and have to be maintained following written instructions.



Documentation of the maintenance

3.5.2 Room, Equipment and Plant Hygiene

All rooms, plant and machinery must be in a clean and hygienic condition. The accumulation of water in unused spaces must be avoided and there may be no large corrosion areas on plant and machinery. The transport containers and vehicles must be kept hygienically clean. Rooms must be protected against pest infestation by installing tightly sealed gates and doors. Areas for storing pallets and barrels need to be cleaned on a regular basis.

Storage, preparation and operating rooms must be cleaned regularly corresponding the cleaning plan. This is especially applicable for the floor covering (fruit and vegetables according to the requirement of a wet cleaning). The frequency of cleaning is based on the work rhythm/restocking in the operating rooms/storage rooms.



Cleaning plans, Disinfection plans, Hygiene Checklist, Assessment Results for the Implementation of Requirements

3.5.3 Ground Clearance

Products are not allowed to come into direct contact with the floor/ground. Containers for storing products are not allowed to be placed directly on to the ground. They must always be stored on pallets or mobile base with wheels, as otherwise there could be a risk of contamination from dirty floors when restacking.

Potatoes and onions

Unpacked potatoes and onions can be stored directly on the ground or on the appropriate equipment if the soil or material on which they are stored is in a clean and hygienic condition.

3.5.4 Packaging Material

Only packaging material from which the outer packaging has been removed is to be used in work rooms. Damage to the packaging material must be prevented (⇒ 2.3.4 Foreign Substance Management).

Reusable packaging (crates, boxes, etc.) must undergo mechanical cleaning after every circulation prior to renewed use. Other suitable processes (e.g. high-pressure cleaners) may also be used to clean large reusable packages (> 60 x 90 cm).



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3.5.5 [K.O.] Declaration of Conformity/Declaration of no Objection (A)

Packaging material and packaging resources must be suitable for the purpose for which they are intended and must comply with current legal regulations.

Certificates of conformity for the packing material used have to be present in the company where the packing takes place. If the packing material is purchased by another company (e.g. an agency) the respective certificates must be present there as well.

The packaging material which comes into direct contact with food must present no health risks and be hygienically flawless. The validity of the declaration of conformity must be ensured. A declaration of no objection must be available for all packaging materials used for which no declaration of conformity is required in line with **Regulation (EU) No. 10/2011 on plastic materials and articles intended to come into contact with food.**

3.5.6 Storage of Packaged Goods

To maintain quality, the following points need to be observed when storing packaged goods prepared for transportation:

- Adequate hygiene conditions
- Protection from physical and chemical risks (adequate temperature, no permanent exposure to light, and so on)

3.5.7 Storage/Transport Containers for Products

Storage/transport containers for products may only be used to store or transport these products. The containers must be suitable for the intended use, harmless to health, clean and hygienic and ensure that the risk of contamination is prevented.

3.6 Order Picking, Outgoing Goods/ Shipping

3.6.1 Technical/Structural Condition

Rooms of order picking and goods issue, in which food is handled must be, in accordance with **Regulation (EC) No. 852/2004 Appendix II**, clean and properly maintained at all times. They must also be planned, designed, built and proportioned in such a way that the necessary level of cleaning and/or disinfection is possible and contamination is avoided or reduced to a minimum and sufficient workspace is available to enable hygienically faultless work processes.

The following requirements must be met:

- Floor coverings must be kept in very good condition and must be easy to clean and disinfect when necessary.
- Wall surfaces must be kept in very good condition and must be easy to clean and disinfect when necessary.
- Ceilings (or roof interiors where there are no ceilings) and ceiling structures must be built and finished in such a way that the accumulation of dirt is avoided and condensation, undesired mould infestation and the flaking of material particles is kept to a minimum.
- Windows and other openings must be built in such a way that the accumulation of dirt is avoided. If they can be opened to the outside, they must be fitted where necessary with insect screens, which must be easy to remove for cleaning purposes.
- Doors must be easy to clean and disinfect when necessary. They must have a smooth, water-repellent surface.
- Surfaces (including surfaces of equipment) that come into contact with food, must be kept in very good condition and must be easy to clean as well as disinfect when necessary. They must be made of a smooth, abrasion-proof, corrosion-proof, non-toxic material.



Work rooms and plant must be kept in an appropriate condition and must be maintained in accordance with written instructions. Maintenance work must be carried out in a hygienic and controlled manner and must not jeopardise the safety of food. All material that is used for maintenance and repair work needs to be suitable for the purpose.

The maintenance programme has to include at least the following elements:

- Transport systems (where present)
- Responsible employees (own employees or those from external companies)
- Frequency

It must be proven by documentation of maintenance work that the requirements listed above are met.



Documentation of the maintenance

3.6.2 Room, Equipment and Plant Hygiene

All rooms, plant and machinery must be in a clean and hygienic condition. The accumulation of water in unused spaces must be avoided and there may be no large corrosion areas on plant and machinery. The transport containers and vehicles must be kept hygienically clean. Rooms must be protected against pest infestation by installing tightly sealed gates and doors. Areas for storing pallets and barrels need to be cleaned on a regular basis.

Storage, preparation and operating rooms must be cleaned regularly corresponding the cleaning plan. This is especially applicable for the floor covering. The frequency of cleaning is based on the work rhythm/restocking in the operating rooms/storage rooms.



Cleaning plans, Disinfection plans, Hygiene Checklist, Assessment Results for the Implementation of Requirements

3.6.3 Ground Clearance

Products are not allowed to come into direct contact with the floor/ground. Containers for storing products are not allowed to be placed directly on to the ground. They must always be stored on pallets or mobile base with wheels, as otherwise there could be a risk of contamination from dirty floors when restacking.

Potatoes and onions

Unpacked potatoes and onions can be stored directly on the ground or on the appropriate equipment if the soil or material on which they are stored is in a clean and hygienic condition.

3.6.4 Tidiness and Organisation

In the area of order picking and shipping of purchased goods, clear procedures and processes must be defined which take at least the following points into consideration, and ensure adherence to these points:

- Temperature
- Labelling (labels, packing slips, QS test mark)
- Best-before date/expiry date/storage instruction
- Damage/impurities

3.6.5 [K.O.] Inspection of Outgoing Goods


A structured and provable inspection of outgoing goods must take place on the premises. Procedures for dealing with non-conformities must be laid down. The relevant employees must be trained in the procedure for dealing with non-conforming products.

Prior to loading, an inspection of accompanying documents and an alignment of products must be conducted, as well as an inspection of the correct product labelling. Specifications must be adhered to.



Random sample tests have to be carried out with a view towards quality maintenance of the relevant marketing standards and/or using the product classes declared valid, if relevant. The random sample test may need to be adjusted depending on the product or country.

It must be ensured that QS goods are clearly identifiable and that there is no risk of mix-ups. When loading goods, temperature-sensitivity and ethylene-sensitivity need to be taken into account (loading plan).

 Checklist Outgoing Goods/Delivery Notes


3.6.6 [K.O.] Labelling of marketed QS Goods (A)

Goods can only be marketed as QS goods, if a corresponding eligibility of delivery exists for the own location in the QS database.

Outgoing goods which are to be marketed as QS goods must be clearly labelled on the accompanying documents (normally delivery notes or EDI shipping notifications) as such when they are leaving the warehouse (Example: apple (QS) or QS apple). This applies also to goods that are certified by a QS recognized standard (e.g. Vegaplan, Global-GAP). An unambiguous allocation of QS produce to the corresponding delivery notes or other accompanying documents must always be possible to take place.

The obligation to label accompanying documents applies regardless of the question of whether the QS certification mark is awarded to the product (⇒ 2.1.2. Use of the QS certification mark). The registration procedures must be comprehensible and feasible with regard to the internal flow of goods. The procedure for labelling QS goods must be laid out and known by all responsible employees who work the products, even if no QS goods are traded.

For labelling of QS goods customers and suppliers can alternatively agree upon general regulations or use synonyms which replace the designation „QS“ (e. g. the designation „Origin Germany“ replaces the designation „Apple (QS)“ on the delivery notes). The procedure must be documented in the quality management manual or in a work instruction, must be known by the respective staff members and the supplier/recipient of the goods and must be comprehensible in the audit.


 Documents for Incoming and Outgoing Goods.

3.6.7 [K.O.] Product Temperature

The legally prescribed temperatures must be maintained and can only be deviated from for short periods when this becomes necessary for practical reasons (e.g. when loading and unloading and during conveyance to the workplace).

The prescribed product temperature of fruit and vegetable items (e.g. processed products) that are required to be refrigerated must not be exceeded. Product-specific regulated temperature ranges have to be met. If lower temperatures are set by the company (internal guideline) and agreed to by the client (e.g. in specifications), the products must be kept at these temperatures and this must be taken into consideration.

The temperatures have to be controlled and documented.

 Temperature records, checklist for outgoing goods

3.6.8 Product Labelling (A)

Every package must contain the following information, depending on legal requirements, in legible, indelible letters and numbers visible from the outside:

- Type of product/ variety denomination
- Country of origin (for potatoes voluntary)



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- Quantity/ filling weight
- Lot/batch number where applicable
- Legal commercial category/ characteristics/ cooking properties where applicable
- Handling notes (post-harvest handling/ sprout suppressants) if required
- Distributor/packer if required
- Sales designation if required
- Special storage notes if applicable (temperature)
- Best-before/ use-by date where applicable
- Notes on allergenic substances where applicable

The following norms and regulations need to be taken into consideration: **German Weights and Measures Act (Eichgesetz), Pre-packaging regulation (FertigPackV), Food Information Regulation (LMIV), Batch marking and labelling regulation (LKV), Price indication regulation (PAngV), Additive approval regulation (ZZuIV), EU marketing standards**

All self-placed information indicated on the label must be correct (for example QS-ID, GLOBALG.A.P. number).

3.6.9 Labelling of QS goods with an identification number (A)

QS goods must be labelled with the OGK-number or another in the QS-database deposited identification number of the producer (e.g. GLOBALG.A.P.-Number (GGN) or Global Location Number (GLN)) in the delivery notes / accompanying documents or on the label of the goods (or box label).

In the case of batches which may contain goods from several producers due to mixing as a result of bulk goods storage or technical packaging or treatment processes (e.g. sorting system) and in the case of packed goods which contain goods from several producers, the QS-ID, the GH-number or another in the QS-database deposited identification number (e.g. the GGN, GLN) of the packing location can be used alternatively.

3.7 Other Business Premises

3.7.1 Packaging Material Storage

Packaging material must be stored in a separate area and kept apart from other goods. The room must be clean and tidy and cleaned in accordance with the cleaning and disinfection plan. When storing packaging material or auxiliary packaging material, contamination risks need to be considered.

3.7.2 Storage of Cleaning Agents and Disinfectants

The rooms or fixtures in which cleaning agents, disinfectants and cleaning equipment are kept must be clean and tidy. They must enable the hygienic storage of the equipment and the distinct separation of equipment for clean/unclean areas. Equipment must be maintained and serviced regularly. There must be a procedure for cleaning the rooms and equipment and disinfecting them when necessary, and personnel must be aware of such a procedure.

Updated safety data sheets and instructions for use must be on hand for cleaning agents and disinfectants.

The responsible personnel must be aware of the instructions, which must be kept on-site. Cleaning equipment and chemicals must be clearly labelled and stored separately from foods and in accordance with the specific requirements.

 Safety Data Sheets, Instructions for use



3.8 Waste Disposal Logistics

3.8.1 Technical/Structural Condition

Food waste and other waste

- must be removed from areas in which food is handled as quickly as possible, in order to avoid an accumulation of this waste.
- must be stored in closable containers. These containers must be suitable for the purpose for which they are intended, must be maintained in a sound condition, and must be easy to clean and, if necessary, easy to disinfect. If there is a risk of mixing up waste and food containers, or another necessity, the containers shall be labelled.


Arrangements for the storage and disposal of food waste and other waste need to be made. Rooms in which waste is stored must be designed and managed in such a way that they can be kept clean and, where relevant, free from animals (dogs, cats, birds) and pests.

All waste must be stored in an area protected against unauthorized interference. It must be disposed of in a hygienically sound and environmentally friendly manner, in accordance with the applicable community legislation, and must have no impact on food.

Waste water systems are designed in such a way that the possibility of an impact on products is eliminated.

In order to avoid unnecessary waste and to ensure efficient use of company resources, the company/enterprise has a company waste management/recycling system. Waste is separated (e.g. dual system, etc.). Recycling management is documented and evidence exists of the following points:


- Waste accrued
- Disposal method
- Whereabouts

 Evidence of Waste Management/Recycling System

3.9 Transport/Logistics

3.9.1 Product-compliant Transport

Transport must be in line with the product requirements. The transport of goods must be in closed, insulated vehicles or in refrigerated vehicles depending on the type of goods, the journey distance and the outside temperatures. Goods which are transported in open containers on open vehicles must be suitably covered.

 Proof of the fulfilment of product requirement transport

3.9.2 Transport Hygiene

The delivery vehicles must be in a hygienic and orderly condition with no residual dirt. Cargo holds and loading areas of transport vehicles may only be used if they are clean and free from contaminations. Prior to loading and after unloading, the loading areas are to be cleaned. In the case of open loading areas, it is sufficient to sweep them clean. The efforts required increase accordingly for closed transport equipment.

The driver and any accompanying persons must be dressed in clean clothing. Clothing must be such that there is no negative influence on the products during handling. The goods to be transported must be loaded in a hygienic manner.

 Checklist Transport vehicles



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3.9.3 [K.O.] Temperature Control

In the case of vehicles of the own fleet the temperature inside the cargo holds must be set according to the goods which are to be transported. It has to be controlled and documented before the journey begins. Where appropriate, the transport vehicle's temperature recorders must be checked/series recorders read. The temperature control before the start of the journey can be dispensed, if during the transportation a continuous temperature recording takes place.

In the case of goods requiring refrigeration (by law), the temperature must be maintained and continuously documented throughout transportation according to the applicable regulations and specifications.

⇒3.3.5. Temperature recording and monitoring



Temperature Records, checklist for transport vehicles

3.9.4 Commissioning of Logistics Companies (Subcontractors) (A)

Commissioned logistics companies that conduct transport operations with QS goods between QS scheme participants on the stages wholesale/logistics and/or preparation/processing or that are commissioned for storage and if necessary for order picking must be registered in the QS database and authorised for the production scope logistics, wholesale or preparation/processing.

GMP+ certified companies that are eligible to deliver for the production scope logistics can only be commissioned for the transport of unpacked, loose potatoes and onions as bulk goods/goods in bulk packs. In addition, companies that are certified at the stage feed industry for the standard QS and that are eligible to deliver for the production scope road transport (feed) can only be commissioned for the transport of unpacked, loose potatoes and onions as bulk goods/goods in bulk packs.

The commissioning party/shipper (QS scheme participant) is responsible for the fulfilment of the requirement. He must inform the logistics company, if the delivery involves QS goods.

If logistics companies are commissioned for transport services at short notice or on a one-time basis (because of a great seasonal volume / within daily contract), deviation from this requirement is permitted. In this event, the logistics companies must be placed under the obligation to comply with the QS requirements (⇒ guideline logistics 2.3, 3, 5). Fulfilment of the requirements on the premises of the service providers (e.g. transport companies) is to be ensured on the basis of provided proof and monitored on a random basis within the context of self-assessment.



For transport services at short notice or on a one-time basis: Proof of implementation of the QS requirements, checklist self-assessment

3.10 Product-Specific Criteria for the Storage of Potatoes

3.10.1 Suitability of Warehouse

The facilities for incoming goods must enable a product-oriented and careful receipt of goods from transport vehicles. The structural and technical layout of the warehouse must meet the requirements for gentle handling of potatoes.

3.10.2 Suitability of the Equipment for Incoming and Outgoing Goods

The number and length of drop heights at the supply terminals must be as low as possible. Furthermore, the passages for the flow of material, belt speed, rolling lines as well as protruding edges, corners and bolts need to be taken into consideration in order to minimise strain on the tubers.



3.10.3 Suitability of Preparation and Packaging Systems and Cleaning

For the processing lines, an analysis of danger spots for damage to tubers and other dangers for the quality and appearance of tubers has to be carried out. The processing area must be cleaned regularly. The cleaning needs to be conducted in such a way that the batches' purity of variety is ensured. Phytosanitary contaminations/impurities and negative health effects on the employees have to be prevented (cleaning plan/hygiene checklist).



Cleaning Plans, Risk Analysis

3.11 Residue Monitoring

3.11.1 Organisation of the Residue Monitoring (A)

The scheme participant needs to be familiar with the organisation of the QS-Residue Monitoring. That includes knowledge of the calculation of the required amount of samples according to the control plan as well as knowledge of the obligation to enter the sample related data into the QS-database in case that fresh non-prepared/non-processed QS-produce were purchased.

3.11.2 [K.O.] Implementation of the Residue Monitoring (A)

The participation in a QS-approved residue monitoring is mandatory for all scheme participants. This obligation refers to fresh non-prepared/non-processed goods. Prerequisites for the implementation of QS residue monitoring include the commissioning of a QS-recognised laboratory for residue analysis, sample-taking in accordance with the control plan and data transfer of the test results to QS through the QS laboratory. The sample volume is based on the amount of purchased QS produce. Adherence to the QS control plan is mandatory. This applies to the required number of samples per product and year, as well as the testing methods set down as obligatory in the control plan for the products in question. All requirements are described in the **QS residue monitoring guidelines**, which are obligatory for the implementation.

The entry of the test results into the database is mandatory for all scheme participants who purchase QS produce. Data which are available or transferred by any other means will not be accepted and will be considered as not provided. The company is responsible for the continuous entry of sample related data and for checking the entry.

All scheme participants who use plant protection products and/or post-harvest handling products are further obliged to comply with the maximum residue levels of pesticides on food (Regulation (EC) No. 396 / 2005) of the country of production and the destination country, and similar provisions.

Exempt from the obligation to implement the residue monitoring are:

- Wholesalers who do not own the goods, but only act as a service provider (e.g. washing, sorting, packing).
- Companies on the stage wholesale, which are closely affiliated with their suppliers at wholesale level organizational and under corporate law (e.g. distribution companies of producer organizations).
The exemption of the obligation for implementing the residue monitoring does not apply for goods that are bought by companies from third parties.



Laboratory Results in Database



4 Traceability and Origin

4.1 Methods and Control of Traceability

4.1.1 [K.O.] Methods of Traceability (A)

There must be evidence of the transparency of the goods flow. Scheme participants must establish traceability systems and processes in accordance with **Regulation (EC) No. 178/2002**. The produced batch size per supplier is defined in order to ensure traceability. Traceability down to at least a day's or a shift's production must be guaranteed.

Each scheduled and incoming goods shipment receives a lot number/ID. The relevant lot number is noted on the corresponding accompanying documents (e.g. dispatch notification/fax of supplier, stock record, quality records, delivery note/packing slip, invoice to the customers, bill for the supplier), and must remain with the goods from the receipt until the issue/departure from the company to the customers. Existing labelling systems may also be adopted, as long as the identity/similarity is given. All necessary data for the identification/class division/sorting/treatment and traceability are documented under the lot number.

The scheme participant is obliged to follow a labelling and registration system which is comprehensible to a third party. This labelling and registration system must ensure the clear identification of goods and the traceability and feasibility of the flow of goods as well as of the packaging material at all times.

It must be ensured that the information on traceability is available to QS within 24 hours after contact has been made with the scheme participant.

Internal traceability processes have to be structured in such a way that the appropriate information can be compiled within four hours.

The following information about customer, suppliers and supplies are relevant:


- Name, address and telephone number
- QS ID and location number (if these identification numbers have been issued within the scope of the QS scheme)
- Type and quantity of supplied products
- Delivery date
- Batch and/or lot number (if issued during the production process)
- Batch/lot numbers on the overpackaging of bulk goods

Supplier List

It must be possible to trace which products were purchased from which supplier. A list of all suppliers must be available.

Customer List

It must be possible to trace which products were delivered to which customer. A list of all customers must be available.

 Batch Labelling, Documents for Incoming Goods (e.g. Delivery Notes, Incoming Goods Inspection) and Documents for Outgoing goods, Traceability System, Supplier List, Customer List




4.1.2 [K.O.] Separation and Identification of QS Goods/Non-QS Goods

A logical system for separating QS goods from non-QS goods must be present in the company. Clear labelling and batch separation of QS goods and non-QS goods must be ensured. If no QS goods are yet present in the company (e.g. in the initial audit), the procedure for goods separation must be demonstrated in a suitable manner.

QS goods must be clearly identifiable in the company. It must be ensured that no product mix-ups occur.

4.1.3 [K.O.] Traceability Check (A)

The traceability of all goods must be checked using an example from production or shipment in accordance with **Reg. (EU) No. 178/2002**. This also applies to packaging in accordance with **Reg. (EU) No.1935/2004**. The system must be checked at least annually.

 Check identification and registration system


4.1.4 [K.O.] Reconciliation of Incoming Goods with Outgoing Goods (A)

There must be a plausible ratio of the amount of purchased goods to the amount of sold goods.

4.1.5 [K.O.] Check of the QS eligibility of Delivery (A)

All companies that deliver QS goods must be clearly identified in the QS database as QS scheme participants with eligibility of delivery at the time the goods are handed over. This also applies for agencies as well as for companies, which handle or store products and do not become the owner of the goods. Additionally, delivering growers must be eligible to deliver for the corresponding production scope and where appropriate for the crop.

If goods are labelled with the QS certification mark on the label or the packaging, the recipient/reseller of the goods must be identified in the QS database as scheme participant with eligibility of delivery.

 Procedure for checking the QS-eligibility of delivery


5 Definitions

5.1 Explanation of Symbols

Notes are marked with **Note**: text in italics

[K.O.] This symbol marks K.O. criteria

References to other applicable documents are **marked in bold**.

 This symbol means: A written confirmation must be provided. Next to this symbol also documents are listed that can be used as evidence. All (also digital) control - and documentation systems, which proof that the requirements are fulfilled, can be used.

⇒ Marks references to other guideline chapters

The requirements relevant to the agencies are marked with an (A).

5.2 Abbreviations

CCP Critical Control Point

HACCP Hazard Analysis and Critical Control Points

K. O. Knock out

CFU Colony-Forming Units



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5.3 Terms and Definitions

- **Agency**
In terms of QS, agencies are companies that exclusively carry out trading and marketing activities without having a direct (physical) contact with the goods. They are the owner of the purchased goods or buyer of the goods in order to further commercialization.
- **Agent/mediator**
In terms of QS, agents/mediators of fruit, vegetables and potatoes, only play a mediating role between suppliers and recipients. They are neither owners nor the possessor of the goods.
- **First-Line Merchant**
A first-line merchant of goods is any company which procures goods directly from growers and therefore brings the product to market first.
- **HACCP (Hazard Analysis and Critical Control Point)**
A system which identifies, evaluates and controls hazards which are significant for food safety.
- **HACCP Concept**
Documentation consistent with the principles of HACCP to ensure control of hazards which are significant for food safety.
- **Labelling**
Labelling is the identification of the QS product on the accompanying documents. Goods that are produced in accordance with the requirements of the QS-scheme, but that are not marked on the delivery notes as QS lose their status as QS-goods. It is not allowed to market these goods as QS-goods.
- **Logistics companies**
As defined by this guideline, logistics companies are companies, which logistically handle – e.g. which transport, ship, load and unload, store and commission – fresh prepared and/or processed fruit, vegetables and potatoes. This comprises all activities involved in delivery per truck (road transport), short-term storage for the purpose of transshipment of the goods during delivery, the long-term storage and the order picking. Logistics companies, which also pack, trade and/or prepare/process goods are categorised as wholesale (first-line merchants or trading partners) or preparing/processing companies.
- **QS-produce**
Products that are produced or marketed according to the requirements of the QS-scheme in a QS-certified company.
- **Service provider**
In terms of QS, service providers are companies engaged in activities within the meaning of the wholesale trade (e.g. storage, sorting, packing). They do not become the owner of the goods.
- **Trading partner**
A trading partner of goods is any company which operates in the market between the first-line merchant and food retail and therefore procures its goods exclusively from upstream companies. If the company purchases some of its goods directly from growers, it is considered a first-line merchant.
- **Use of Mark**
Use of mark describes the display of the certification mark on the product.

You find a listing of general terms and definitions in the **Guideline General Requirements**.



Revision Information Version 01.01.2020

Criterion/Requirement	Changes	Date of change
2.3.1 Water quality	Clarification: Sampling must be carried out by a qualified sampler according to a risk-based plan. For the analysis of the water, only laboratories accredited for drinking water analysis may be commissioned.	01.01.2020
2.5.2 Information on the QS scheme	Renaming: previously "Information/training on the QS scheme".	01.01.2020
3.1.7 [K.O.] Labelling of purchased QS goods	Deletion: From the requirement "Labelling of purchased QS goods ", the section for labelling QS goods with an identification number is now a separate requirement and was extended.	01.01.2020
3.1.14 Labelling of QS goods with an identification number	New: The requirement for labelling QS goods with an identification number is now a separate requirement. Extension: In the case of batches which may contain goods from several producers due to mixing as a result of bulk goods storage or technical packaging or treating processes (e.g. sorting system) and in the case of packed goods which contain goods from several producers, the QS-ID, the GH-number or another in the QS-database deposited identification number (e.g. the GLN or GGN) of the packing location can be used alternatively.	01.01.2020
3.6.6 [K.O.] Labelling of marketed QS goods	Clarification: Goods can only be marketed as QS goods, if a corresponding eligibility of delivery exists for the own location in the QS database. Deletion: From the requirement "Labelling of marketed QS goods ", the section for labelling QS goods with an identification number is now a separate requirement and was extended.	01.01.2020
3.6.9 Labelling of QS goods with an identification number	New: The requirement for labelling QS goods with an identification number is now a separate requirement. Extension: In the case of batches which may contain goods from several producers due to mixing as a result of bulk goods storage or technical packaging or treating processes (e.g. sorting system) and in the case of packed goods which contain goods from several producers, the QS-ID, the GH-number or another in the QS-database deposited identification number (e.g. the GLN or GGN) of the packing location can be used alternatively.	01.01.2020
3.8.1 Technical/Structural Condition	Extension: If there is a risk of mixing up waste and food containers, or another necessity, the containers shall be labelled.	01.01.2020



Criterion/Requirement	Changes	Date of change
3.9.3 [K.O.] Temperature Control	<p>Clarification: The requirement refers to vehicles of the own fleet.</p> <p>Change: The temperature control before the start of the journey can be dispensed if during the transportation a continuous temperature recording takes place.</p> <p>Extension: The requirement was extended to include continuous temperature recording during the transport of goods requiring refrigeration (by law).</p>	01.01.2020
4.1.5 [K.O.] Check of the QS eligibility of Delivery	<p>Change/Clarification:</p> <p><u>Check of the QS eligibility of delivery for supplying companies:</u></p> <p>All supplying companies that deliver QS goods must be clearly identified in the QS database as QS scheme participants with eligibility of delivery at the time the goods are handed over. This also applies for agencies as well as for companies, which handle or store products and do not become the owner of the goods. Additionally, delivering growers must be eligible to deliver for the corresponding production scope and where appropriate for the crop.</p> <p><u>Check of the QS eligibility of delivery for recipients/resellers:</u></p> <p>If goods are labelled with the QS certification mark on the label or the packaging, the recipient/reseller of the goods must be identified in the QS database as scheme participant with eligibility of delivery.</p>	01.01.2020



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QS Fachgesellschaft Obst-Gemüse-Kartoffeln GmbH

Managing Director: Dr. H.-J. Nienhoff

Schedestrasse 1-3
53113 Bonn

Tel +49 228 35068-0
Fax +49 228 35068-10

info@q-s.de
www.q-s.de

Photos: QS