Carlsberg Quality Requirements
for Suppliers

Document issued by Carlsberg Group Quality
Carlsberg A/S, Gamle Carlsberg Vej 4-6, 1799 Copenhagen V, Denmark
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SUMMARY

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Preamble

The so called "Product Specification" schedule referred to in a supply agreement between a Carlsberg Group entity and its supplier encompasses where applicable a 3-part documentation consisting of:

1. This Document – Carlsberg Quality Requirements for Suppliers

2. The Group Specifications describing Carlsberg's general conditions and requirements applying to a given type of material (e.g. glass bottles, cans, malt, flavours...). Group specifications take priority over local specifications.

3. The Local Specifications stipulating material/item-specific technical characteristics not provided by the Group Specifications or exceptions to Group specifications approved by Group Quality. They may be described in a form and/or a drawing. These specifications apply exclusively to the Breweries having issued them.

NB:
The above documents complement each other but are managed independently regarding their updating. Carlsberg is entitled to generally amend its quality manual and specifications for a given product, keeping the relevant suppliers informed in due time.
1 General

1.1 Purpose and Scope
The purpose of this manual is to provide the non-negotiable Carlsberg Group Quality requirements for all suppliers.

The Carlsberg Group is producing beverages meant for human consumption. This means that product safety is extremely important and that Suppliers constantly should be aware when organising their supply to the Carlsberg Group.

All materials supplied must be fit for purpose. This document is part of Carlsberg’s Quality Management System however Carlsberg does not routinely carry out goods at receipt analysis so mainly relies on the supplier’s quality management system to ensure that legal, food safety and product specific requirements are met.

Some quality requirements might not be applicable due to the nature of the supply, e.g. software does not need food safety certificates. If in doubt the Supplier shall contact their normal Carlsberg procurement contact for clarification.

1.2 Responsibilities
Carlsberg Group Quality is responsible for setting the standards and specifications for the raw or packaging materials and collaborating with the Supplier in development initiatives leading to material improvements. Carlsberg Group Quality is also responsible for setting the general quality requirements for materials not coming directly into contact with the final products (e.g. POS material) and also services provided to Carlsberg.

Local specifications (see preamble) are set by local Carlsberg operating companies in coordination with Carlsberg Group Quality.

Carlsberg Group Procurement is responsible for the contracts signed with suppliers.

The Supplier is fully responsible for the quality of its goods and services. The Supplier commits to consulting and supporting the Carlsberg Group by informing the site(s) being supplied and the lead buyer regarding:
- Actions to improve the quality of the end product
- Material improvements
- New developed materials and their advantages
- Management of defects (immediate notification is required)
- Potential cost reduction without negative impact on quality.

1.3 Document Control
This is a controlled document owned, maintained and issued by Carlsberg Group Quality. The document will be updated periodically; it is intended that this will be once per year. Single point of contact: Carlsberg Group Quality Director.
2 Supplier Approval & Quality Assurance

Carlsberg Supplier approval and quality assurance is based on:
- Approval / qualification of supplier sites by audit or other processes
- Commitment of the supplier to deliver products in conformance with agreed technical specifications
- Qualification process for any new product or change in product specification
- Continuous evaluation of the supplier

Approval is required:
- For all new suppliers / plants
- for all new types of supplies
- for all supplies requiring a new manufacturing process at the supplier's site, particularly for a new production line or production site
- for all changes concerning supplies already used industrially

Only approved suppliers may supply products to Carlsberg Group companies.

2.1 Supplier Audit

Carlsberg decides exclusively whether an approval audit of the supplier's production plant(s) will have to take place before commencement of any supply, and whether and to what extend, routine audits will be carried out periodically during the period of supply. This is intended to ensure that the supplier makes use of all possibilities in order to ensure delivery of products of the required, consistent quality at the relevant date in the desired quantity. The mandatory requirements are listed in the pre-audit documentation which will be sent to the plant prior to audit.

If any weaknesses are identified during the audit, Carlsberg expects the implementation of an action plan for the correction of defects as quickly as possible. Should any significant quality problems occur we reserve the right to perform additional supplier audits at the supplier's plant. Carlsberg must be granted insight into all product quality related documents at any time.

Only approved suppliers' plants are accepted for delivery of raw and packaging materials. No disapproved supplier plant (no matter whether goods or services) can be used for delivery to Carlsberg Group. No changes of delivering plants within a Supplier's company or use of a sub-Supplier shall be made without prior written agreement from Carlsberg Group beforehand. This agreement will not to be unreasonable withheld.

The use of Third Party Suppliers is expressly forbidden, unless explicitly agreed with Carlsberg; the Third Party Supplier must be subject to satisfactory completion of an approval audit.

Approval audits and inspections carried out by Carlsberg on the supplier's premises do not release the supplier from its responsibility for product quality. The supplier is fully responsible for the quality of its goods and services including logistic delivery quality and customer support.

Carlsberg Group has the right to suspend the approval of a Supplier's plant, should the non compliance with the requirements be demonstrated or issues occur that can not be resolved promptly to the satisfaction of both parties.

2.2 Required Commitments of the Supplier

The supplier will be expected to comply with Carlsberg Corporate Social Responsibility Policies – latest version available on demand – and especially to demonstrate care for health and safety of operators on production sites.

Carlsberg reserve the right to disqualify a supplier, a supply site or a product should issues not complying with Carlsberg group (part 1 & 2) and LBP (part 3) requirements arise that are not resolved promptly, to the satisfaction of both parties.
2.3 Product Qualification (Raw and Packaging Materials)

Trial qualification procedures shall be used in the following cases:
- Start of production at a new supplier, or site, or re-approval (for new or existing products)
- A new type of product
- Introduction or renewal of new, key equipment
- Modification of a product
- Introduction to a new Carlsberg site, line or contract packaging line

To be approved, the supplier products may be subject to qualification based on the following elements:
- Audit of the first production, depending on the material
- Sample production must be carried out to assess the supplier’s performance. The supplier must collect data from production to determine product performance and to confirm that the products meet specification standards. Supplementary analyses of samples at an independent laboratory may be requested by Carlsberg.
- Qualitative and quantitative control upon receipt and/or upon use in the production plant by means of a production trial

2.4 Supplier Evaluation

Once approved, the supplier is subject to systematic evaluation based on the following elements:
- Approval and routine audits and/or possible product/process audits, or other monitoring processes
- Qualitative and quantitative control upon receipt and/or upon use in the factory
- Possible supplementary analyses in the Carlsberg laboratories or 3rd party laboratories accepted by Carlsberg
- Other assessment criteria defined in the relevant supply agreement, such as service, commercial issues and compliance with Carlsberg's Suppliers Code of Conduct etc.
3 Quality Requirements

It is required that a documented Quality Management System which meets the requirements of ISO 9001 in its latest version is implemented and operating in all approved Supplier's plants.

Additionally it is required to implement a concept for the avoidance of food safety risk to consumers and operators and product contamination with foreign materials (HACCP).

The standards shall continuously be reviewed, emphasising on continuous improvement in all areas.

It is recommended that all Supplier plants, manufacturing materials that are intended to be used as an ingredient for the production of beverages, have a documented Food Safety Management System implemented and operating (e.g. ISO 22000 in the latest version).

It is recommended that all Supplier plants, manufacturing packaging materials that are coming directly in contact with beverages, have prerequisite programmes implemented that fulfil the requirements lined out in PAS 223 (Prerequisite programmes and design requirements for food safety in the manufacture and provision of food packaging).

All Suppliers will be required to demonstrate the successfully applied methods during the supplier audits.

3.1 Legislation

The Supplier is committed to meeting the Carlsberg Group specific clauses where relevant. All materials must comply with current laws and regulations in the producing and selling countries as well as any applicable standards set by EU-legislation, whether deliveries take place into EU/EFTA or outside.

If the Supplier receives new information relating to legislation amendments he shall inform the Carlsberg Group (the receiving site(s) and the lead buyer).

3.2 Certificates

Food safety certificates (e.g. Allergens, GMO, food grade, contaminant and pesticide controls, as specified in the supply agreement) and Material Data Sheets are required and must be sent to the receiving Breweries:
  - Prior to the first delivery, for new products
  - Every year, after a one-year regular supplying period
  - At any change of characteristics of the product even if the specifications are not foreseen to be changed.

A Certificate of Analysis (COA) of the delivered batch must be sent to the receiving Brewery with each shipment or on its request. It must encompass the parameters described in the respective material specifications, agreed between Carlsberg Group and the Suppliers.

3.3 Controls within the Responsibility of the Supplier

3.3.1 Raw Materials and Process

The Supplier must have systems in place to ensure that his own material Suppliers are audited and/or approved according to defined standards and his materials controlled during intake, whether internally produced or externally sourced.

Statistical Process Control techniques must be in place throughout the manufacturing process especially for key variables, to control and minimise defects and to improve the manufacturing process with the aim to run as closely to target as possible.

Defects (see section 3.4) must be detected by calibrated and regularly checked inspection equipment and managed through non-conformance procedures guaranteeing that any suspect product can not be released.
3.3.2 Finished Product

It is the Supplier's responsibility that the agreed specifications are met by performing regular analyses using officially recognised methods. Any changes to specifications must be notified and agreed in advance by Carlsberg.

The Supplier must use a laboratory which shows satisfactory results in an internationally recognised proficiency scheme (e.g. MAPS for malt analysis) or is accredited for the method of analysis.

When specific control plans defined by Carlsberg Group apply, they are described in the specifications of the concerned materials.

The delivered raw or packaging materials may be randomly sampled to be analysed or tested by Carlsberg laboratories. However, such sample analysis does not change the rights of Carlsberg with regards to defect products.

3.4 Non-conformance

Any defect will be evaluated according to the below classification.

**Critical**
Defects possibly resulting in hazardous or unsafe conditions for individuals using or maintaining the material (in normal conditions) or potentially injurious to health, or where potential for a lawsuit against Carlsberg exists.

- Defects that prevent the intended performance or functionality of the material or product, rendering it useless for the customer.
- Defects that make the product subject to legal seizure, or not comply with any mandatory or legal regulations (standards) or as per the requirements.

**Major**
Defects other than critical possibly deteriorating the material and/or are likely to result in failure, or to reduce the usability or function of the product for its intended purpose, or having an obvious aesthetic non-conformity which affect the sale of the products and lessens the value as per the customer's requirements.

**Minor**
Defects which are neither critical nor major but may cause interruption of production if they occur at a moderate rate of incidence.

- Defects that are not likely to affect or reduce the usability of the product for its intended purpose or are a departure from established standards or per the customer's requirements, having little bearing on the effective use of the products or services, but may reduce the sale of the products.

In cases where a quality related disagreement occurs between the supplier and Carlsberg Group, an independent technical expert will be nominated by both parties. The conclusion of the independent expert will be accepted by both parties.

In special cases where a concession is requested for delivering non-conforming materials, the Supplier must inform Group Quality and the contractual party in due time so that a written agreement can be formalised prior to the delivery.

If the supplier requests a concession to use a different raw material or supplier, he must guarantee that the final Carlsberg product for which the material will be used will not be affected. Delivery may only take place after a written agreement is issued by the relevant contractual party/parties within the Carlsberg Group in alignment with Group Quality rules and approvals.

A batch or a fraction of a batch rejected by one local entity can in no way be conveyed to another local entity on the Supplier's initiative.

3.5 Crisis Situation

A crisis can be any incident which leads to a potential or actual health hazard, the stopping of production or a serious environmental or other incident which may adversely affect Carlsberg's production or reputation.

Supplier and Carlsberg Group (including the receiving brewery) both undertake to inform the other party of a crisis situation that could be critical to either parties or their business.

The crisis contacts must be defined for both parties.
### 3.6 Qualification of newly designed or modified Materials

Trial procedures shall be followed in order to approve newly developed materials or if significant changes are likely to affect the material or its usage in production, e.g.:
- Material sourced from a new Supplier, an existing Supplier’s new plant or post re-approval of a plant
- Implementation or renewal of key-equipment in a Brewery
- Usage at a new Brewery or production line.

The modification of a material must only be done in collaboration with Carlsberg Group. A trial schedule and test criteria is to be agreed with Carlsberg Group Quality.

The roll-out of a qualification process basically consists in:
- Carrying out laboratory and/or pilot tests to verify the suitability of the material and identify possible specification adjustments (phase 1)
- Checking and optimising the functionality and the performance of the material when processed in pilot or small-scale industrial tests (phase 2)
- Verifying that the material is fit for purpose in normal production conditions at industrial scale.

The final approval authority lies with Carlsberg Group Quality.

The Supplier will provide the test material free of charge for legal and technical tests. If an external laboratory is needed to carry out the analysis, the Supplier has to cover the costs.

### 3.7 Traceability

Each unit (pallet, container or other) must be identified and traceable to manufacturing data, such as test results, batches of raw materials used, production records and any other relevant information likely to affect the quality of the product.

The following information must at minimum be provided for each unit, in the most appropriate format (e.g. pallet or container label, marking, delivery receipt):
- Batch number
- Name of the supplier
- Production plant
- Item code and description
- Order and/or delivery number
- Manufacturing date
- Shelf life / expiry date
- Recommended storage conditions

All Suppliers will be required to demonstrate satisfactory traceability during the supplier audits.

### 3.8 Material Packing, Storage and Transport

Packing must ensure the full protection of the goods from the manufacturing plant up to the production unit of the receiving local entity or the final destination of the products, and prevent them from any damage or contamination by e.g. humidity, frost, dust, foreign bodies or abnormal substances and/or odours. Packing must also meet the functional and safety requirements of the receiving local entity and allow optimised production conditions, and therefore be agreed by both parties.

Packing materials must be suitable to food contact where relevant and allow an easy and complete cleaning.

Storage and transport of the materials lie under the responsibility of the Supplier be they undertaken by him or by sub-suppliers. If used, sub-contracted storage and transport companies must have been approved by the Supplier. Operators should have knowledge of the goods and be experienced in the transport and handling of the materials.
3.9 Hygiene and Housekeeping in the Supplier’s Plant

The Supplier shall in addition to the quality management system also have a written hygiene policy in place and successfully implemented which will be required to demonstrate during the supplier audits. The basic rules for hygiene and housekeeping that have to be included as a minimum are:

**Personnel:**
- No drinking, smoking or eating outside permitted areas
- Good hygiene practices
- Personnel trained in hygiene awareness and following the procedures for avoiding product contamination

**Equipment:**
- Production equipment and conveyors protected in risky areas, e.g. under walkways, at cross-over points...
- Lamps directly over unprotected materials must be shielded (risk of glass splinters)
- Environment and equipment kept clean

**Production and storage buildings:**
- Pest control process in place covering the manufacturing plant and premises
- Secured external doors and windows
- No unauthorized access
- No animals
- Storage areas kept clean