KAT Guide on Egg Processing

for egg product plants, the food industry and trading companies

Version 2022.01





KAT – Verein für kontrollierte alternative Tierhaltungsformen e.V.

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Part I: Basic principles

1 Preamble

The Verein für kontrollierte alternative Tierhaltungsformen e.V. (Association for Controlled Alternative Animal Husbandry, KAT) is the most important inspection body in Germany and neighbouring EU countries for the inspection of eggs from alternative forms of hen keeping (free-range, barn and organic egg production). Virtually all eggs offered for sale on the German market by the food retail trade bear the KAT conformity seal. The number of member establishments has grown continually since the association was founded in 1995.

The chief objectives of KAT are:

- to ensure full traceability, assurance of origin, and quality assurance of eggs and egg products from barn, free-range and organic husbandry produced, traded or placed on the market by Members;
- to lay down and implement uniform requirements for the barn, free-range and organic husbandry of laying hens, taking account of animal welfare issues;
- to lay down and implement uniform requirements for the husbandry of male laying hybrids, taking account of animal welfare issues;
- transparency for the consumer by providing information (e.g. through the www.was-steht-auf-dem-ei.de website).

2 Scope of application

This Guide was drawn up for the processing of KAT eggs into KAT egg products or foodstuffs manufactured from them and applies to all companies that manufacture, pretreat, process or market egg products/foodstuffs from eggs originating from approved KAT establishments. The Guide serves as a tool for the systematic implementation of KAT requirements for the assurance of origin and traceability of processed KAT goods.

3 Egg products in the KAT system

Processed KAT goods may only be manufactured using eggs from KAT-certified laying farms. This is the only way of guaranteeing comprehensive assurance of origin across the whole process chain, from the laying farm via the egg product plant to the food industry, and to the final distribution stage. The labelling of egg products or foodstuffs made from them with the "KAT- Ihr Prüfsystem für Eier" [KAT – Your inspection system for eggs] label is possible only if the relevant documentary evidence has been provided.

4 Participation in the system

Any establishment that wishes to be part of the KAT value chain must register with KAT at www.anmeldung.kat.eu and – if not already a participant in the KAT system – enter into a KAT participant contract.

Certification in accordance with a standard recognised by the Global Food Safety Initiative (GFSI) such as IFS or BRC is a compulsory requirement for participation in the KAT system. A valid certificate must be submitted with the application documents. A list of all standards recognised by the GFSI is available on the Internet at http://www.mygfsi.com/

Once the KAT Office has been provided with all of the necessary registration documents and signed participant contract, the establishment will be given access details for the KAT database and the database instructions.

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5 Responsibilities

Every stage in the value chain is responsible for complying with the described requirements and for correctly reporting the necessary data to the KAT database.

If the system participant/food business operator recognises or has grounds to assume that a foodstuff that they have placed on the market, produced, processed, manufactured or marketed does not meet food safety requirements, and/or if they have grounds to assume that a foodstuff that they have placed on the market may be harmful to human health, they must take immediate measures to withdraw the foodstuff concerned from the market. If KAT system goods (KAT egg products or finished products made from them) are affected, the KAT Office must be informed without delay. Furthermore, if there is a threat of damage to the image of the KAT system, the system participant is obliged to coordinate its actions with the KAT Office: statements to third parties referring to the requirements/bases of the KAT system may only be made after prior liaison with the Office.

KAT Crisis Management Guide for Member Establishments

6 Data protection

The data entered by the system participant in the KAT database system are stored on the internet server and computer system and on data storage media. All data are protected against tampering and access by third parties through state-of-the-art technology. Master data are not transferred to third parties and are used exclusively by KAT for participant administration.

Only the KAT Office and the participants themselves have access to the data entered in the system. Data is only disclosed to entities outside the system ("the public") after consultation with the system participants or on official instruction.

For the purpose of plausibility checks, the KAT Office has comprehensive access rights to participant data and can also access information on bird movements at all production and sales stages included in the KAT system.

7 Internet portal

In order to create greater transparency, KAT offers a special service on the query page at www.was-steht-auf-dem-ei.de: by entering the number printed on the egg (stamp number), consumers can find out the name and location of the laying farm and view pictures of the henhouse and birds. The query function is also available as a smartphone app.

Further information on the KAT system can be found at www.kat.eu. Every KAT participant can register for the internal area of the website and download the documents held there (circulars, forms, member lists etc.).

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Part II: List of requirements

1 Condition of participation

1.1.1 **[K.O.]** A valid certificate issued by a standard recognised by GFSI is available.

If a certificate is withdrawn during the validity period of the certificate, the KAT Office is informed immediately.

Information: Trading companies are excluded from this rule. In this case, no certificate relating to a standard recognised by the GFSI is required.

1.1.2 For companies with more than one site that are inspected during matrix controls, a copy of the head office's certificate of conformity is held at every site.

2 Storage

2.1 Cleanliness and hygiene

2.1.1 The establishment is kept clean and tidy. In terms of hygiene law, the site poses absolutely no risk for the product.

2.2 Separation of flow of goods

- 2.2.1 **[K.O.]** KAT goods/KAT-OKT goods can be identified at all times and at all stages in the process from the receipt of goods to goods issue by means of in-house labelling of the goods and also by labelling them in all of the accompanying documents. This also applies to all semi-finished or finished products. Any possibility of KAT and KAT-OKT goods being mistaken for or mixed up with third-party goods is excluded.
- 2.2.2 There is separate storage according to form of production, as well as separation into KAT goods, KAT-OKT goods and third-party goods (raw products, finished goods and processed/processing goods).

Information: For the purposes of spatial separation, a separated area and containers that are clearly defined and identified are acceptable conditions. The stamping of eggs alone is not sufficient for differentiating the various forms of production.

- 2.2.3 When accepting non-packaged KAT egg products, a written procedural instruction or an enterprise resource planning system is in place for the unloading process that excludes the risk of the products being confused for or mixed up with third-party goods and that prevents them from being unloaded into the wrong tank. The tank is clearly reserved for KAT goods.
- 2.2.4 Tanks/containers for the intermediate storage of non-packaged KAT egg products are clearly allocated and labelled.
- 2.2.5 The tanks/containers do not contain any residues of third-party goods when filled with KAT goods. An appropriate cleaning process to remove any residue of third-party goods is documented.
- 2.2.6 In order to prevent any contamination of KAT goods with third-party goods, no residues of foreign goods are left in the production facilities other than those that are technically unavoidable. For this purpose, an appropriate procedure (e.g. compliance with production sequences or the implementation of suitable cleaning steps) is applied and documented.

Information: In egg drying plants, a flushing batch of 25 kg is required after mechanical cleaning, following which the goods must be declassified as KAT goods.

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For liquid egg production, CIP or cleaning with water must be carried out before the production of KAT goods.

3 Labelling

3.1 Use of the KAT logo

3.1.1 <u>Delivery notes and invoices</u>

The KAT logo may be used as a general logo on delivery notes and invoices provided that the items are also clearly marked as KAT or third-party goods or are exclusively KAT goods.

3.1.2 Consumer packaging

The KAT design rules for use of the KAT logo on consumer packaging are adhered to. The consumer packaging is approved by the KAT Office.

KAT logo design rules

3.1.3 **[K.O.]** Products packaged in consumer packaging that bears the KAT logo exclusively contain KAT-certified egg products. An exception is made for any necessary technical additives or similar that are not included in the list of ingredients.

3.2 Labelling of goods

3.2.1 The stamped information on the eggs complies with the rules imposed by the current marketing standard for eggs.

Information: According to the marketing standard, an exemption from the labelling requirement may be requested from the responsible authority if the supplier is delivering the eggs directly to the processing industry.

Information: Cracked or soiled eggs do not need to be stamped.

- 3.2.2 Every pallet/transport packaging containing shell eggs must have a label that includes at least the following information:
 - ✓ Name and address of supplier
 - ✓ Clear KAT or KAT-OKT labelling
 - ✓ Stamp number
 - ✓ Number and/or weight of eggs
 - ✓ Laying date or laying period
 - ✓ Dispatch date
 - ✓ In the case of class-B eggs: packing date/form of production

Information: Simply stamping the eggs as the only way of labelling the goods is not sufficient.

- 3.2.3 Labels on egg products/semi-finished/finished products contain at least the following information at the time of goods receipt and goods issue at the egg product plant, and at the time of goods receipt by the food industry:
 - ✓ Name and address of supplier and recipient
 - ✓ Clear KAT or KAT-OKT label
 - ✓ Item number and/or item designation
 - ✓ Batch number
 - ✓ Weight

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- ✓ BB date
- ✓ Form of production
- ✓ Dispatch date (not for stock or pre-packed goods)

Information: Labels on stock do not need to include any KAT label or the dispatch date.

The stock must be clearly identifiable on the basis of batch number.

Information: The labels are uniform and clearly visible. For liquid egg products, the containers are labelled and, for powders, every box is labelled; simply labelling the pallets is insufficient.

In the case of deliveries by tanker, the labelling is included on the accompanying documents and delivery notes, and via the enterprise resource planning system where applicable \rightarrow 3.3

3.3 Labelling in documents

The following points must be noted:

- If the documents for incoming goods are not given any KAT labelling, the goods will no longer be traceable in the KAT system and the goods may no longer be marketed as KAT goods. Deliveries to the food retail trade are an exception: in this case, the KAT product can be defined and traced via the item number.
- If outgoing processed goods destined for the food retail trade include information
 to the effect that they are to be marketed as KAT goods, all of the requirements for
 KAT processing in accordance with this Guide apply to the products accordingly.
 This information, in addition to labelling as KAT items (on the item itself or on the
 delivery notes), may also take the form of customer specifications or corresponding
 company policy statements.
- 3.3.1 The designation "KAT" or "KAT-OKT" is always used in conjunction with the item designation (e.g. in the case of eggs: "eggs from KAT barn production", "eggs from KAT-OKT barn production" and for egg products: "KAT whole egg from barn production" or "KAT-OKT whole egg from barn production").
- 3.3.2 The KAT status can be traced in all of the records and documents of relevance to the KAT traceability system.
- 3.3.3 The delivery notes and invoices for incoming and outgoing goods include at least the following information:
 - ✓ Address of supplier and recipient
 - ✓ Clear KAT or KAT-OKT label
 - ✓ Item number and/or item designation
 - ✓ Batch number, if applicable
 - ✓ Form of production
 - ✓ BB date
 - ✓ Delivery note number or invoice number
 - ✓ Quantity
 - ✓ Dispatch/delivery date
 - ✓ Additionally for shell eggs: class-A goods/class-B goods/unsorted eggs/goods intended for industrial processing

Information: Delivery notes to the food retail trade are excluded.

- 3.3.4 KAT items are clearly labelled as such in the commodity (for example egg powder, liquid egg, unsorted shell eggs) specification and in the product specification.
- 3.3.5 The commodity specification is countersigned by the supplier.

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- 3.3.6 KAT items are clearly labelled in the product formulation.
- 3.3.7 If the customer is a food retailer, KAT products must be labelled as such on at least one of the following documents:
 - ✓ Customer specification
 - ✓ Delivery notes/invoices
 - ✓ Consumer packaging (use of the KAT logo) (→ 3.1.2)

Information: If a company exclusively purchases and processes KAT goods, i.e. if there are no third-party goods in the operation, this can be formulated in an internal requirement, and the labelling obligation according to → 3.3.3 no longer applies.

- 3.3.8 The weighing logs for incoming goods at egg product plants at least include the following information:
 - ✓ Date and time of weighing
 - ✓ Weighed amount
 - ✓ Form of production
 - ✓ Stamp number of incoming goods
 - ✓ Clear reference to the delivery note
 - ✓ If the log comprises several pages, the calculated total must be typed at the end of each page or at least the total number of pages must be indicated with each page number.
- 3.3.9 The records and documents used in production (e.g. production lists, formulations, specifications) indicate the KAT status.

Information: This does not apply to establishments that only handle KAT goods.

3.3.10 No reference is made to KAT goods in the list of ingredients if the finished product contains other premixes containing egg in the form of third-party goods.

4 KAT database reports

The goods reports are entered weekly – by no later than midnight on Wednesday of the following week – into the KAT database at https://datenbank.kat.eu.

The goods reports take the form of incoming goods reports and outgoing goods reports. Every establishment is responsible for correctly inputting the required data in the KAT database. The access details are treated as confidential. The establishments are responsible for the accuracy of the input data.

The KAT database reports include all data necessary for traceability and plausibility checks.

Information: For goods reports to non-KAT participants, the general KAT-ID IND set up for this purpose can be used.

4.1 Data reports

4.1.1 The data for incoming goods are reported to the KAT database on a weekly basis.

The following applies for the weekly incoming goods reports:

 The quantity of KAT goods received in incoming goods must always be entered in the KAT database, even if only a proportion of these are to be

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processed into KAT goods. The quantity documented on the delivery notes must correspond to the quantity received in incoming goods.

- Third-party goods are not reported.
- A weekly zero report is to be submitted if no KAT goods were procured within one calendar week.

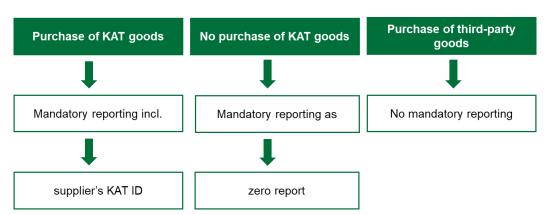


Figure1: Weekly reporting process for incoming goods

4.1.2 The data for outgoing goods are reported to the KAT database on a weekly basis.

The following applies for the weekly outgoing goods reports:

- Only the quantities of KAT goods that are produced and marketed are reported in the outgoing goods. This can be a manufactured KAT egg product, a KAT semi-finished product or a KAT finished product (sold to the food retail trade). The recipient of the invoice must always be stated as the recipient of the goods.
- Third-party goods are not reported.
- A weekly zero report is to be submitted if no KAT goods were marketed during the reporting period.

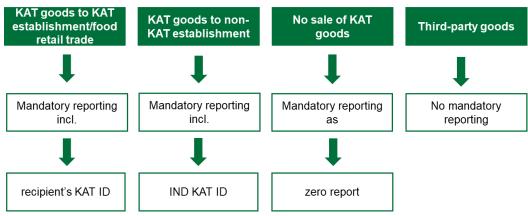


Figure 2: Weekly reporting process for outgoing goods

- 4.1.3 The KAT goods are reported on a customer-specific basis.
- 4.1.4 The KAT goods are reported on an item-specific basis.

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4.2 Exemption from outgoing goods reports

Full exemption from outgoing goods reports

Establishments operating in the food industry may be fully exempt from the requirement to produce outgoing goods reports under the following conditions:

- ✓ Exclusive procurement and processing of KAT goods
- Manufacture of end products (no further processing) and packing in pre-packaging
- ✓ Exclusively direct sale to the final distribution stage (e.g. food retail trade, gastronomy, catering)

Partial exemption from outgoing goods reports

Establishments that only procure and process KAT goods may apply for exemption from the requirement to produce outgoing goods reports for end products that are packed in prepackaging and/or for products that are exclusively sold to the final distribution stage directly. If KAT semi-finished products are also supplied to industrial establishments for further processing, these products must be reported to the KAT database.

The following points must be noted:

- Egg product plants and trading companies are excluded from this rule.
- The food industry establishment must apply to the KAT Office for an exemption. Renewed checks will be carried out during every audit to ensure that the site continues to meet the exemption criteria.
- FB-V-01-EN_Exemption_outgoing_goods_report
- The establishment must immediately report to the KAT Office any changes to the conditions listed under → 4.2.
- 4.2.1 If the establishment is exempt from outgoing goods reports, the conditions listed under → 4.2 must be met.

5 Documentation requirements

- 5.1.1 The master data provided to KAT are complete and up to date. Any changes to the master data are reported to the KAT Office immediately.
 - FB-V-02-EN_Master_data_sheet
- 5.1.2 Contingency plans with clearly defined responsibilities are in place in the event of an emergency or critical situation. These include all of the key contact persons (e.g. veterinary surgeon, veterinary inspection office, suppliers/buyers, KAT) and their contact details (telephone numbers), and ensure the availability of all responsible persons outside operating hours.
 - FB-A-02-EN_Emergency_plan
- 5.1.3 An internal audit is implemented and documented at least every 12 months on site based on the inspection criteria set out here.
- 5.1.4 All documents relevant to the flow of goods are kept for at least 12 months after the expiry of the best-before date.
- 5.1.5 Files are organised on the basis of accounting requirements, with delivery notes and invoices for KAT goods stored separately.
- 5.1.6 The delivery notes and invoices are kept on file for all incoming and outgoing KAT goods.
- 5.1.7 The KAT item has its own item number. There are no item numbers that are used for both a KAT item and a third-party item.

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- 5.1.8 If a customer specification exists, the details in the in-house product specification/formulation match those in the customer specification.
- 5.1.9 All documents relevant to production are consistent and complete. Depending on sector (egg product plant/food industry), the following documents are required:
 - ✓ Egg cracking logs
 - ✓ Tank plans
 - ✓ Pasteurisation logs
 - √ Filling logs
 - ✓ Mixing logs
 - ✓ Production logs
 - ✓ Cleaning logs
- 5.1.10 For each product made from KAT goods, recipes are available listing the egg content of the initial ingredients or final product.
- 5.1.11 The incoming goods documents for semi-finished goods at least include the following information:
 - ✓ Dry mass content
 - ✓ BB date
 - ✓ Clear KAT label as described under → 3.3

6 Quantity balance

6.1 Plausibility check

6.1.1 The data reported for incoming KAT goods are complete and correct.

The quantities, types and times on all of the incoming goods reports match the information on the corresponding invoices and delivery notes.

6.1.2 The data reported for KAT outgoing goods are complete and correct.

The quantities, types and times on all of the outgoing goods reports match the information on the corresponding invoices and delivery notes.

6.1.3 **[K.O]** The goods flow for KAT products can be calculated.

Taking account of the standard values (see Annex) for the product calculations and the dry mass contents, outgoing goods are mathematically traceable against incoming goods.

- 6.1.4 The labelled incoming KAT goods are posted correctly in the establishment's internal system in a way that ensures traceability.
- 6.1.5 With regard to incoming goods, the link between delivery notes and invoices can be clearly established and is plausible.
- 6.1.6 With regard to outgoing goods, the link between delivery notes and invoices can be clearly established and is plausible.
- 6.1.7 All invoices are posted correctly and in full. The information in the sales statistics for the supplier accounts is complete and correct. A direct link can be established between the delivery notes for the incoming goods and the data from the weighing logs.
- 6.1.8 **[K.O.]** The egg content in the initial ingredients and in the final product can be calculated using standard values. The egg product batch can be clearly assigned to the production batches.

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- 6.1.9 The establishment relationships (suppliers and recipients) stored in the KAT database are complete and match the establishment's internal supplier and customer lists.
- 6.1.10 The records and documents selected at random for inspection during the document check (e.g. production lists, cleaning logs, formulations, specifications) are correctly labelled and plausible.
- 6.1.11 By evaluating sales of KAT items, the outgoing goods for the period under review can be traced.

6.2 Traceability

6.2.1 **[K.O.]** Throughout the entire production process, every production batch is fully traceable using the batch number assigned to it. The batch numbers of KAT goods are traceably linked with the item numbers. In outgoing goods, KAT goods are clearly identifiable as such. Measures are in place to ensure that KAT goods can be traced on an item-specific and quantity-specific basis.

Information: In instances where goods are carried over from an existing batch to be used up in a second batch, the information must be copied over to the new batch.

- 6.2.2 It is always possible to establish a reference between the item and batch numbers for the outgoing goods and the batch numbers for the incoming goods.
- 6.2.3 When using rework, the reference to the original batch is given. The quantity used is comprehensively documented.

Information: This does not apply to establishments that only handle KAT goods.

Information: If the reference to the original batch or the quantity used cannot be traced, the rework must not be used for KAT goods.

- 6.2.4 The KAT product is clearly assigned to a specification through its item number.
- 6.2.5 It must be ensured that purchased KAT goods are KAT system goods. For this purpose, the supplier's KAT certificate of conformity must be regularly checked for validity.

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Part III: Annex

1 Signs and symbols

[K.O.] Knock-out criteria

References to applicable documents

Required documents/documents for submission

2 Abbreviations

EU European Union

FB Form

KAT e.V. Verein für kontrollierte alternative Tierhaltungsformen

KAT ID KAT identification number

K.O. Knock-out

BBD Best-before date

OKT Without the killing of chicks

VA Procedural instruction

3 Definition of terms

Tab.: 1: Definition of terms

Term	Definition/explanation
A goods	Eggs classed as quality class A.
B goods	Eggs that lack the quality characteristics of class A eggs, or that are downgraded from class A
Egg products	Processed products resulting from the processing of eggs, or of various components or mixtures of eggs, or from the further processing of such processed products (definition as per Annex 1 No. 7.3 of Regulation (EC) No 853/2004); the products may be liquid, concentrated, dried, crystallised, frozen, deep-frozen or fermented; they may only be produced from hen's eggs (Gallus gallus domesticus); other foods or additives may be added to these products; within the KAT system, there is documentation of those egg products that are also specified in the declaration of the respective mixture/food
Egg product plant (EP)	An establishment in which egg products are made, i.e. where eggs are treated or pretreated
Label	Collective term for the labelling of goods in containers; the label can take the form of an imprint, stamp etc. in a durable form

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Term	Definition/explanation
Finished products (foodstuffs)	Products that are sold directly to the food retail trade without further processing
Third-party goods	Goods from establishments/operational areas that are not members of the KAT system and that do not hold a KAT conformity certificate
Semi-finished product	Premade upstream product (e.g. egg products) that is either in storage on the company's own premises for later use or supplied to other companies, where it is turned into a finished product
Trading companies (HA)	Companies in which egg products and foodstuffs are procured and marketed (purchase/sale) in the company's own name and/or invoicing occurs without any physical link to the goods; trading activity with egg products and products made from them
Industrial goods	Eggs not intended for consumption that are supplied exclusively to the non-food industry and that are identified accordingly
KAT goods	Goods from KAT-certified establishments that are subject to the external certification process across all production and delivery stages
Mixing establishment/processor	Establishments that receive egg products and mix or process these products further into compounds for the food industry
Food industry (NI)	Establishment for the further processing of egg products into finished products, such as biscuits, cakes, egg liqueur, pasta

4 Applicable documents

The documents can be downloaded from the internal area of the KAT website www.kat.eu. Applicable documents (in the currently valid version) include:

KAT documents

- ✓ KAT logo design rules
- ✓ VA-V-01-EN_Database_reports
- ✓ FB-V-01-EN_Exemption_outgoing_goods_report
- ✓ FB-V-02-EN_Master_data_sheet
- ✓ FB-A-02-EN_Emergency_plan
- ✓ KAT Crisis Management Guide for Member Establishments

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5 Guide values for calculation

The guide values are used to calculate the yield after treatment and/or processing of eggs. The auditors refer to these values when calculating the plausibility of the KAT goods flow. Internal fluctuations are possible.

5.1 Standard values for calculating the plausibility of egg products:

Technical protein: including 4-5% adherent protein
Whole egg yield: 85-87% of the shell-egg weight

Protein percentage: approx. 65% of the whole-egg yield Egg yolk percentage: approx. 35% of the whole-egg yield Lysozyme: approx. 0.3% of the egg-white yield

5.2 Dry mass contents

Whole egg powder: min. 96%

Egg yolk powder: min. 96.5%

Protein powder: min. 92%

Whole egg: approx. 23%

Egg white: approx. 11%

Egg yolk: approx. 43%

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