

Specifications in the food packaging chain

This information leaflet is aimed at all elements of the food packaging chain, at producers and users of food packaging and intermediate materials. Its objective is to support the combined effort towards safe food packagings. In detail, it shall

- support and enhance the communication within the supply chain for any type of food packaging,
- provide ideas and standard operation procedures for the wording of product specifications for packaging materials, packagings and packaging components,
- inform neutrally on legal requirements and industry-wide recommendations for their implementation.

There is a wealth of different types of packaging materials and possible combinations that can be used for food packagings. Therefore, the advice provided here is deliberately worded as neutrally as possible in terms of materials and products. It shall serve predominantly for information and as possible suggestions for the compilation of own specifications. For the implementation into practice, these specifications must be individually adapted to the respective cases. The example described in the annex is not a sample form to be used in practice!

The adherence to this information does not release the individual party participating in the marketing of food from complying with the specific food law responsibilities. This information shall just support the parties in fulfilling their due diligence. The different types of declarations of compliance significant within the supply chain with regard to food legislation and their delimitations will be discussed.

The German Federation of Food Law and Food Science (BLL) has compiled this information leaflet with the greatest of care and in consultation with food packers, food traders and key representatives from the supply chain. It is supported by the following BLL member companies:

- *PlasticsEurope Deutschland e.V. - (PlasticsEurope Germany)*
- *Industrievereinigung Kunststoffverpackungen e.V. (IK) - (German Association for Plastics Packagings and Films)*
- *Verband der Druckfarbenindustrie (VdL) - (German Printing Ink Industry Association)*
- *Fachverband Faltschachtel-Industrie e.V. (FFI) (Association of the Folding Boxes Industry)*
- *Verband Deutscher Papierfabriken e.V. (VDP) (German Pulp and Paper Association)*
- *Verband Metallverpackungen e.V. (VMV) (Association of Metal Packagings)*
- *Bundesverband Glasindustrie e.V. (Federal Association of the German Glass Industry)*
- *Gesamtverband der Aluminiumindustrie e.V. (Federation of the Aluminum Producing and Processing Industry)*
- *Industrieverband Klebstoffe e.V. (IVK) (German Adhesives Association)*

(For further information provided by individual trade associations - see page 19)

I General information and definition of terms

a) Information on the legal framework

Regulation (EC) No 1935/2004¹ defines the community framework for the production and placing on the market of materials and articles intended to come into contact with food. It contains basic definitions, general rules and production requirements, approval and labeling obligations.

One general requirement concerns the migration of substances from materials: Food contact materials and articles *“shall be manufactured in compliance with good manufacturing practice so that, under normal or foreseeable conditions of use, they do not transfer their constituents to food in quantities which could endanger human health or bring about an unacceptable change in the composition of food or bring about a deterioration in the organoleptic characteristics thereof”*.

According to these general requirements, a migration of substances from food articles and materials into food is not generally prohibited; it can be tolerated as long as it poses no risk for human health or has an unacceptable detrimental effect on the quality of the food. This means that the general requirements cannot be interpreted as an imperative rule for minimization or substitution.

For certain categories of materials (e.g. plastic and ceramic materials, regenerated cellulose film, “active and intelligent” materials) the general requirements are specified in amending regulations in which a principle of proscription has been laid down for certain groups of materials. This means that for these groups of substances there are positive lists for approved substances, purity criteria and specific limiting values for migration available. Such detailed instructions are not available for all types of suitable and usable materials. At any rate, the general quality requirement has to be applied to the migration of substances. According to this stipulation, the producer or marketer has to make sure that food contact materials and articles release substances only to a limited extent during use. It is at the discretion of all parties concerned to support the implementation of this requirement by specifications.

Commission Regulation (EC) No 2023/2006² constitutes general rules on good manufacturing practice (GMP) for all groups of food contact materials and articles listed in Annex I to Regulation (EC) No 1935/2004 and combinations of those materials and articles or recycled materials. This makes the so-called GMP regulation an overall horizontal provision which specifies the existing individual regulations and which is also applicable to the production of not legally specified materials.

According to the GMP regulation, the production of food contact materials - including intermediate materials - must include appropriate, effective and documented quality assurance systems while using specified starting materials and following defined specifications. The use of the principles of good manufacturing practice has to be monitored via an in-house or a quality control system; record keeping of all measures, actions, specifications and results is mandatory.

The GMP regulation describes specifications as being part of the quality assurance documentation (*“appropriate documentation in paper or electronic format”*). The producer of food contact materials is required to establish and maintain such documentation as far as it is relevant to the compliance and safety of the finished material or article.

¹ “Regulation (EC) No 1935/2004 on materials and articles intended to come into contact with food” (Official Journal of the EU L 338 of 13 November 2004, page 4 ff)

² “Regulation (EC) No 2023/2006 of 22 December 2006 on good manufacturing practice for materials and articles intended to come into contact with food” (Official Journal of the EU L 384 of 29 December 2006, page 75 ff)

b) Terms (as used in this information leaflet)

Food packaging

A packaging is an entity of components that shall predictably serve the purpose to cover a certain product (content) in a targeted and removable fashion.

The function of a food packaging is primarily geared at protecting the product (maintaining its properties), ensuring its transportability and storability as well as transmitting information (labels, printings).

A packaging system (as used in this information leaflet) is defined as the sum of components of a packaging combined into a functioning concept. The components can be very different materials (packaging materials) which can consist of various intermediate products (see figure 1).

Parts or insides of food packaging come into contact with food during use; this means that they are food contact materials as defined in Regulation (EC) No 1935/2004. Other packaging components that are not intended or foreseen as coming into contact with food (e.g. labels adhered to the outside, secondary packaging) are still essential for the total functionality of the packaging or the packaging system. Due to their nature or functioning principle, they can also have an impact on the packed food.

The principles of Regulation (EC) No 1935/2004 apply to the packaging system in total. This means that the barrier properties of the entire system or of individual components are decisive for the determination of a possible migration of substances.

Added to that, the hazard analysis within the meaning of an HACCP concept which falls within the scope of responsibility of the food packaging enterprise requires a safety assessment of the entire packaging system including an evaluation of the impact of packaging and packaging components and their interactions.

In this respect, the following has been included in this information leaflet:

- **packaging coming into contact with food**

and

- **packaging or packaging components not coming into contact with food**

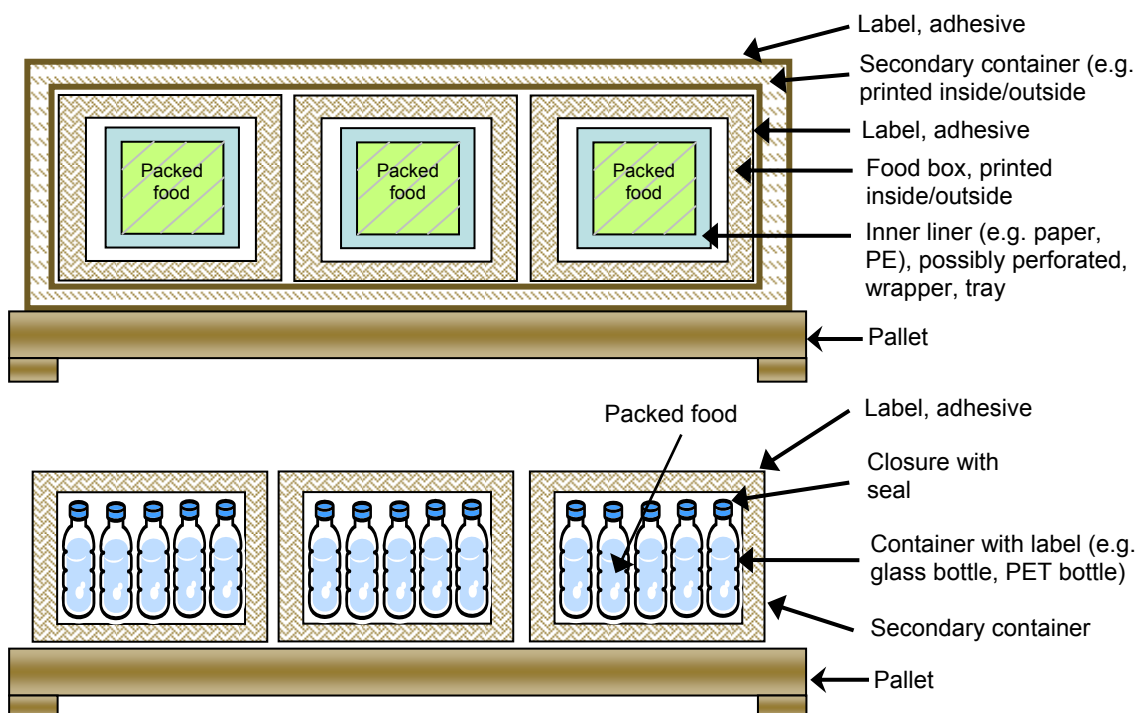


Fig. 1: Examples of packaging concepts/systems

Specifications (general)

A specification is the formal description of a product or system, possibly in combination with a service.

The specification has the objective of defining and quantifying parameters that can be used by the customer to check and accept the product of a supplier upon delivery.

In practice, specifications do not contain all product requirements; legal requirements do not have to be stated as they have to be complied with anyway.

A specification is a technical document that can also be compiled for safeguarding commercial or legal interests (liability, warranty). A deviation from the (minimum) properties defined in the specification constitutes a material defect which gives reason for a warranty claim.

In the best scenario, a specification is a document which is agreed between all parties concerned and is completed at the end of an in-depth communication process.

(Details on food packaging specifications are provided below, page 6 ff)

c) Difference between specification and declaration of compliance

For the food packaging supply chain, declarations of compliance and general declarations of conformity with law play a decisive role. However, (packaging) specification and declaration of compliance are not synonyms. In fact, they are different types of documents with different objectives. They cannot replace each other in the handling and processing of food packagings within the supply chain.

However, it is possible that a specification refers to a declaration of compliance or contains agreements regarding the compliance.

Specifications are the result of a mutual harmonization and communication process between supplier and customer. They contain a detailed description of the properties of a product, in particular its technical and specific suitability. The product may be a packaging material, a packaging component or a packaging concept consisting of several components. The declaration of compliance refers to a specific packaging material and just confirms its general suitability for food contact under certain conditions.

A declaration of compliance is a unilateral affirmation (provided by the supplier) that the food contact materials complies with the relevant legislation under consideration of the stated conditions of use. This means that the issuer is responsible for and bound to the information provided in the declaration of compliance.

Objective, contents and issuing of a declaration of compliance are defined in a legally binding way within the relevant regulations. Such declarations of compliance have to be delivered to the customer and presented to the authorities during inspections. On the other hand, specifications are voluntary agreements and must not be disclosed.

The same applies for the difference between a legally not regulated statement or any other confirmation of compliance of the product with the relevant regulations and a packaging specification.

Detailed explanations and information are available in the BLL information leaflet:

- *The "Declaration of Compliance" for food contact materials and articles according to the German Commodity Ordinance (December 2008),*
<http://www.bll.de/themen/bedarfsgegenstaende>

Other leaflets and samples for declarations of compliance are available among others from

- Milchindustrieverband e.V. (Association of the German Dairy Industry)
- pro-K Industrieverband Halbzeuge und Konsumprodukte aus Kunststoff e.V. (pro-K, industrial association for intermediate and consumer products made from plastic materials)

II Information on the compilation of a food packaging specification

According to the requirements of the GMP Regulation (see page 2), it is necessary that customer and supplier clarify in writing possible issues and compile the respective specification documents. It is recommended that specifications and requirements are clarified in detail, in terms of quality, production and intended use of the food packaging by mutual consent and that all issues are stated in a summarizing document. A specification ensures clear responsibilities and mutual process safety.

a) Scope and validity of a packaging specification

In general, a specification can be compiled for all types of packaging materials and packaging components. The contents of such a specification have to be adapted to the respective materials.

The scope of the specification shall be clearly described and refers to a specific packaging material for a defined application or to its suitability for use with a certain food product.

The entire packaging system or the design of the packaging (entity of components) such as inner liner, container, secondary container, folding box, closures, printings, labels etc. shall be described in as much detail as possible even if the specifications refer to only one of the respective packaging components.

Generally the specification becomes, directly or via reference, a part of the contractual agreements between the supplier (tenderer, contractor) and the customer (client, buyer, principal); it clarifies the conditions of purchase and delivery (contract). In the best of all cases it is released, signed and validated by representatives from both parties (supplier and customer).

In principle, the specification is binding for both parties. Modifications of the production process, the composition, the intended use or the further processing require a mutual agreement; they must not be done unilaterally if they affect the product or result in deviations from the specifications.

If the use deviates from the specification, the user (packer/customer) must assure himself of the suitability. A general disclaimer of warranty within the scope of a specification is not possible. All information given and all test results apply for the specified product under consideration of the stated food, contact conditions or content, respectively.

Technical drawings can be enclosed as a supplement or further detail to the specification; with that they become a binding part of the agreement.

Detailed information on the material composition of individual packaging components are, in general, not part of the specification. If necessary, the parties can agree on a confidential disclosure, e.g. to commercial laboratories. The specification is also not a declaration of legal conformity; however, a reference to declarations of compliance may be included in the specification (see page 5).

Information on inspections, migration tests or other examinations are the subject of other documents (declarations of compliance and/or supporting documents).

It is possible in the specification to agree on tests and to lay down criteria or limiting values/acceptance values for certain criteria as well as knock-out criteria. In case of product tests, the specification is the basis for the assessment. Both parties shall reserve the right to tests or inspections. Sampling can also be part of the agreement.

The benefit of a specification is dependent on its content of information; the more detailed and comprehensive the information is, the more valuable and “stress free” the specification can be. It can include many different parameters; however, it shall at least contain statements on all relevant parameters. In individual cases, acceptable alternatives may be described by the parties concerned or knock-out criteria defined.

Standard products are often described within the scope of technical data sheets that are provided by the suppliers. While these shall not be put on a level with a specification, they can nevertheless be the basis for specifications which, in general, are more detailed and more comprehensive.

For general supply agreements and call-off orders, it is possible to refer to already existing specifications.

Key aspects for packaging specifications:

- Result of well-timed anticipatory communication
- Clear definition of the binding contract
- Clear assignment of tasks and responsibilities
- Defined scope
- As specifically as possible, as detailed as necessary
- Technically sound, appropriate information
- Comprehensible description of the entire packaging system
- Does not serve as a declaration of conformity with law
- Becomes effective with acceptance and signature

Table 1: Key aspects for packaging specifications

b) Communication along the chain

An immanent part of the product development process for food is the development of a packaging system that complies with legal requirements and also takes into consideration the needs of the food product and its shelf life, the distribution conditions, possible consumer expectations and quality principles of the supplier.

For the supplier of packaged food it is important to communicate as early as possible with the potential suppliers of packagings, packaging materials and packaging components on the basis of a product and process description in order to develop a technically sound and appropriate specification (for possible processes (idealized) please see figure 2a and 2b and chapter II c below).

For clarification of a certain packaging specification (list of materials and substances, technical details, tests conducted, sampling etc), the producer of a packaging material and/or the refiner have to request information from the upstream suppliers and include these in the specification. In order to achieve this, the entire packaging system must be known and communicated along the entire chain. Added to that, some time must be taken into consideration and the necessary periods provided that are needed for the adaptation to in-house processes (see also figure 3 and 4).

At the time of signing the agreement, the complete specification shall be available and the supplier (producer of packaging materials or converter) shall have completed the necessary clarifications within the chain. There might be technical data sheets for certain standard products that can be integrated in the specification (see figure 2a)).

The food packer (customer) is responsible for providing the required information regarding the food product, the packaging situation (packaging and closing machines) and his expectation from the packaging material.

It is not relevant who actually starts the communication process, whether it is the customer with a certain request or the producer of the packaging material with a special offer; the essential aspect is that the flow of information is a two-way, smooth and targeted communication. This assumes that all parties involved are ready for dialogue and that they focus on the essential questions and answers.

In general, the following is valid: The more detailed the specifications and description are, the better is the process of developing and defining a certain packaging. Another general rule is that the user/customer has to review his special application and use of the packaging, in particular, if no individual coordination of the packaging specification takes place and only general specifications or standard product descriptions are being adopted or if the information provided is not complete.

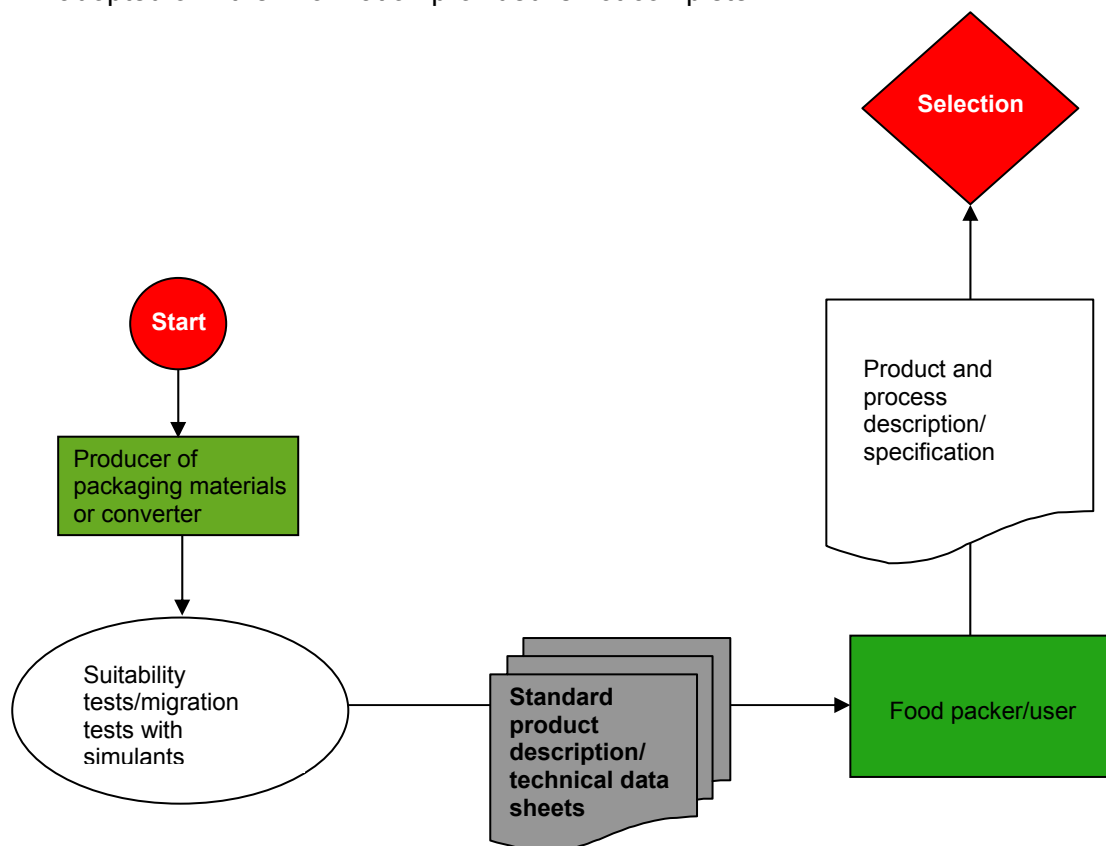


Fig. 2a) Standard packaging material for food

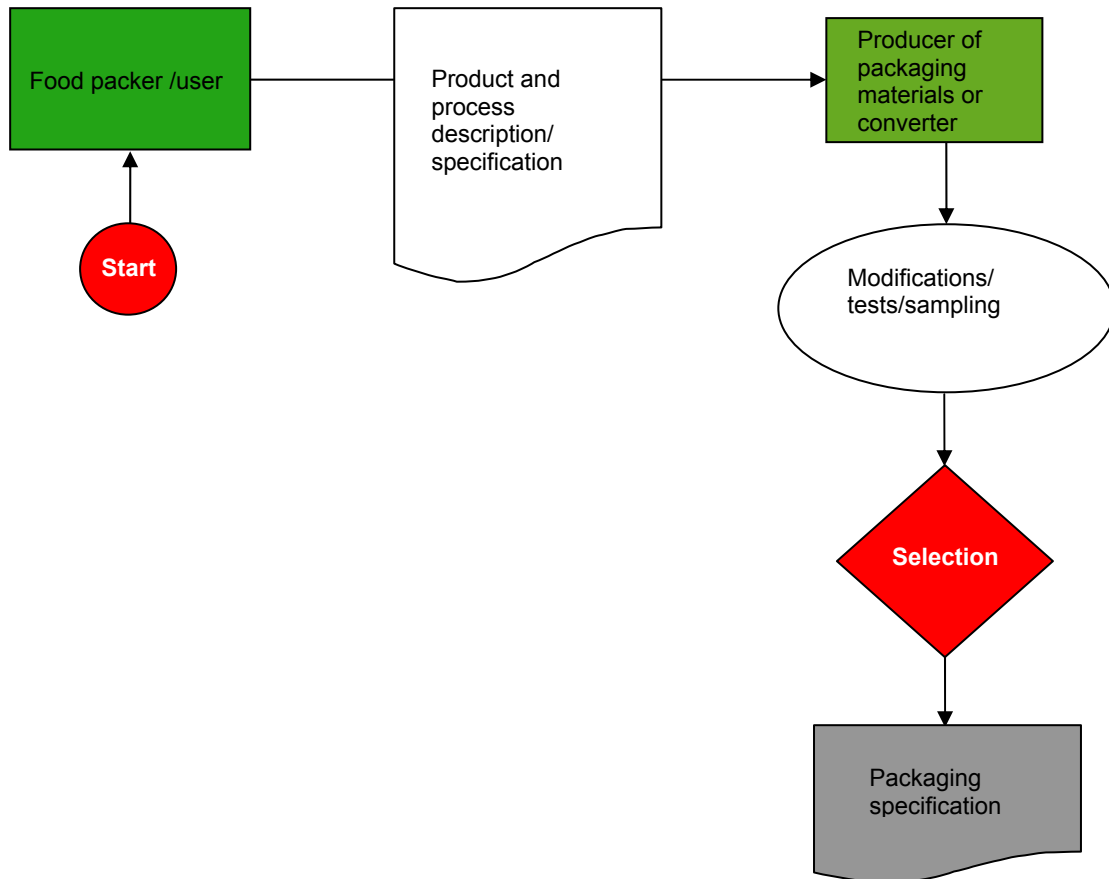


Fig. 2b): Design of a specific packaging application

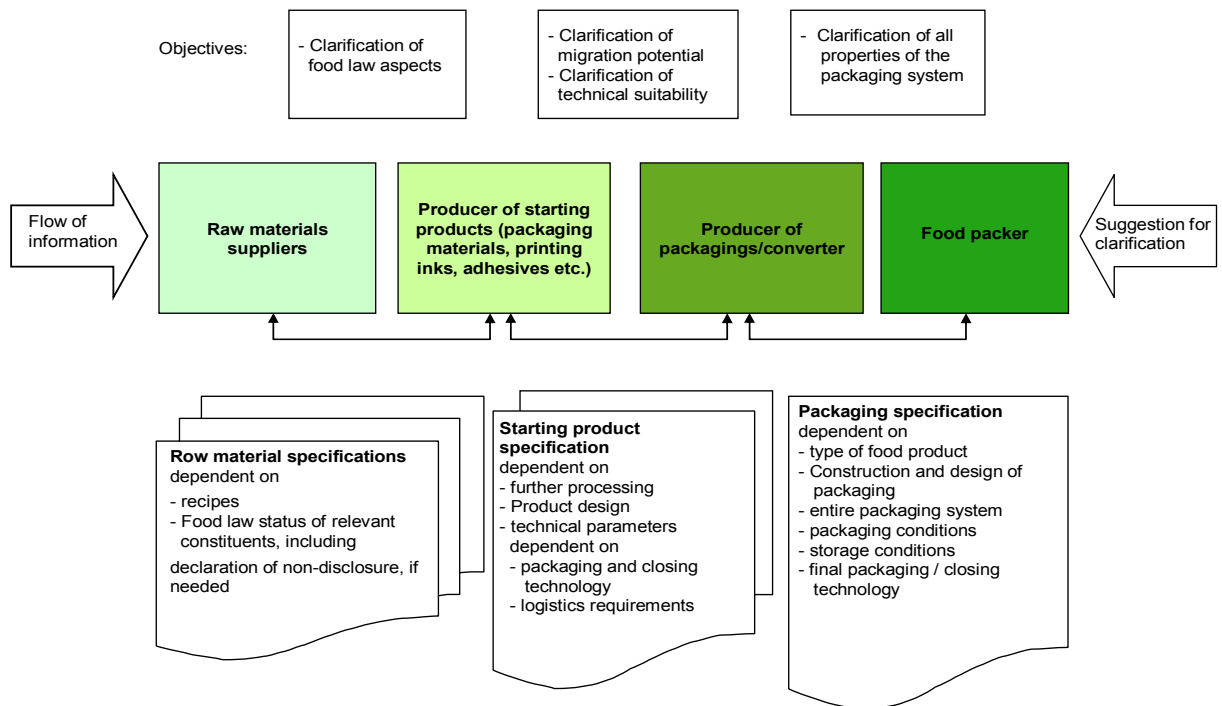


Fig. 3: Flow of information along the supply chain

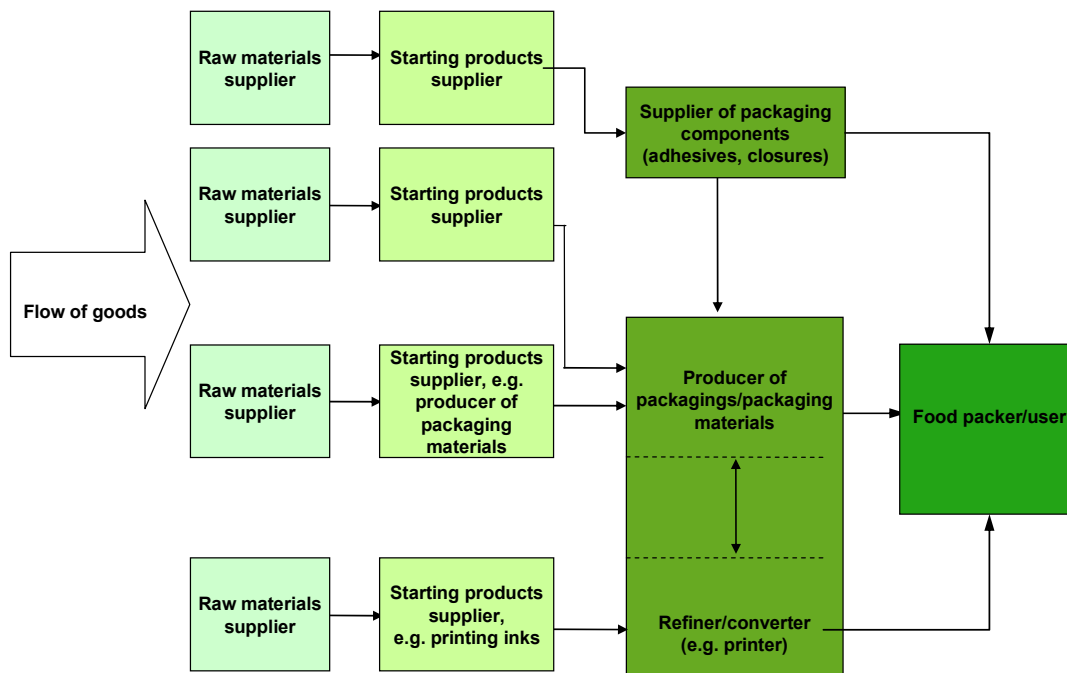


Fig. 4: Principle of a supply chain for food packagings

c) Internal communication

For a timely, smooth and targeted definition process for a specification, the internal communication in the respective companies (supplier and customer) is of utmost importance. The mutual goal and result of a good communication process will be the coordinated and sound specification.

Details and terms of the specification need to be clarified with all business departments (purchasing, engineering, product development etc.); the expectation of the customer also needs to be communicated in order to ensure a properly developed specification.

Within the scope of the internal customer-oriented quality management organization and for proper integration of different business departments, it is recommended that coordinated processes including release rules are defined; at the same time the body responsible for the contact with the customer and the entire organization shall be defined (in general, the sales department). The aim of such regulations is to ensure that all relevant departments are able to participate and that the agreements, timing and responsibilities are understandable.

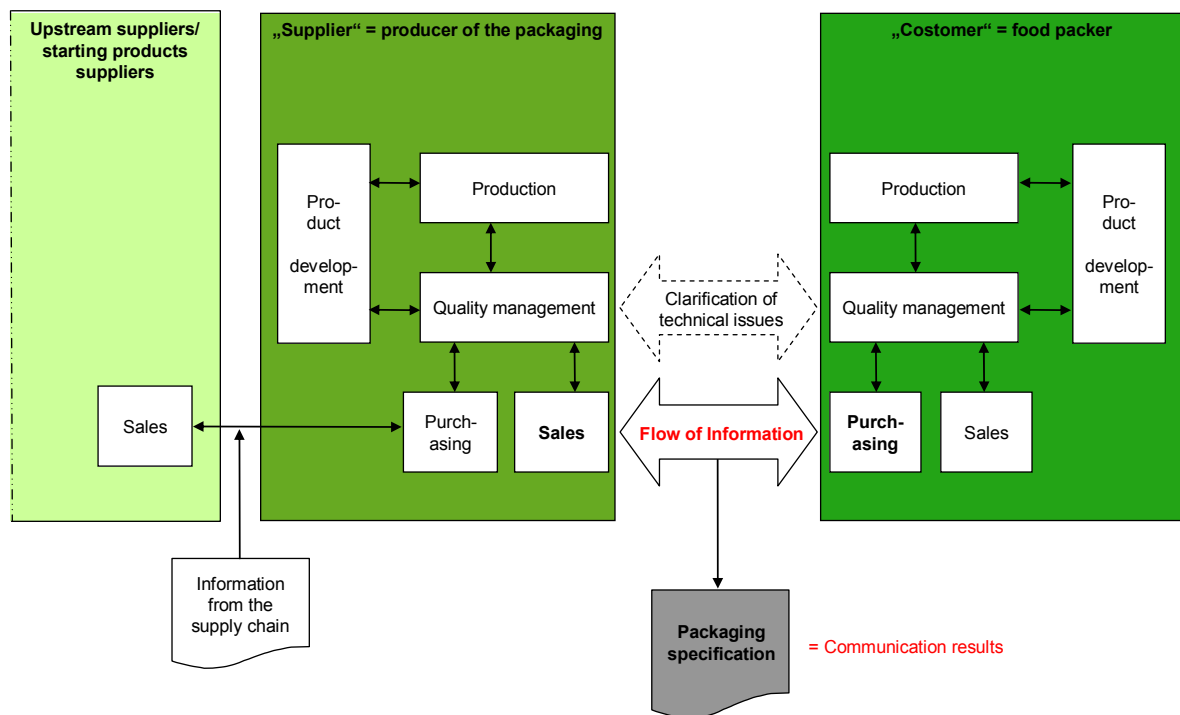


Fig. 5: Example: Communication between supplier and customers

III Scope of specification

A specification should have a clear structure and include the following items:

- a) Identification of the customer**
- b) Scope/identification of the specified product**
- c) General agreements between customer and supplier**
- d) Specific agreements/limitations**
 - aa) Reference to legal regulations/recommendations
 - bb) Information on specific suitability/exclusions
 - cc) Confirmation of compliance with the specification
- e) Descriptions**
 - aa) Description of the packaging material/packaging components
 - bb) Description of the food product to be packed/used
 - cc) Description of technical suitability/machineability
- f) Agreements regarding tests/delegation of tests/information on specific test issues**
- g) Releases/signature/date/revision**
- h) Annex/certificates/drawings**

Information regarding the description of the packaging material, the food product and the technical suitability (see e)) are summarized in table 2. This list is a comprehensive collection of key words which may become specification criteria. It shows a range of possible parameters, however, it does not claim to be complete. Dependent on the type of packaging material and packaging components, relevant parameters can be selected.

An example of a packaging specification with the respective features is included in the **Annex**.

This example is not a sample form to be put into practice but rather is intended for demonstration purposes only. It is necessary to adapt this form to individual, company and product related requirements!

Collection of possible parameters for the specification

Type of packaging

Packaging component coming into contact with food

Packaging not coming into contact with food

- Secondary container
- Part of a packaging
- Packaging component behind a barrier

Barrier properties

- Absolute barrier
- Functional barrier
- No barrier

Type(s) of packaging material

- Components
- Composition
- Layer composition/thickness

Design

- Dimensions/geometry
- Surface: volume ratio

Requirements based on the product to be packed

Type of food

- Liquid/solid
- pH
- Dry
- Fatty
- Aqueous/pasty

Suitable stimulant

(Minimum) shelf life of the food

Capacity

Packing conditions

- Heat treatments
- Sterilization
- Ambient temperature/tropics/frozen
- Microwaveable
- Baking oven proof
- Rupture proof

Storage conditions for the food

Conditions of use

Reusability

Requirements from the packaging technology

Machineability

Glueability

Smoothness

Seal stability

- Temperature
- Pressure

Mechanical stress (packaging material and packed good)

Deep-drawing process	
Closing system	
Type of closure	- Closing materials - Sealing materials
Adhesives	
Perforation	
Sealed seams	
Labels	
Label material	
Adhesive for labels	
Mechanical properties	
Breaking resistance	
Tensile strength	
Tear strength	
Information on authorizations, approvals and recommendations	
BfR recommendations (BfR = German Federal Institute for Risk Assessment)	
Transportation and storage conditions of the packaging material	
Possible sources of contamination	- Shrink film - Pallets
Temperature, humidity	
Periods of use	
Sensory properties	
Further processing	
Varnishes	- Additives - UV coatings - Dispersion varnish - Solvent based coating
Foil stamping	- Hot foil stamping - Cold foil stamping
Lamination	- Type of foil
Printing/Imprint	
Printing inks/varnishes	- Migration optimized inks
Materials to be printed	- Outside - Inside
Printing technology	- Offset/rotogravure/flexo printing - UV hardening
Optical properties	- Shade of color - Gloss
Fastness	- Light fastness - Fat fastness

Table 2. Parameters for a specification

Information regarding the determination of barrier properties and possible migration

Packagings and packaging systems, respectively, protect the food product from environmental influences (including gases, humidity, light). Added to that, according to the principles laid down in Regulation (EC) No 1935/2004, the food product has also to be protected from the migration of constituents from the packaging components (see page 2).

The entire packaging system has to be included in the evaluation of migration risks. The sum of barrier properties displayed by the individual components within the entire concept is decisive.

If the migration can be excluded because of a sufficient barrier effect provided by one or several packaging components, this is relevant for the decision e.g. in terms of printing. Basically, metals and glass are classified as barrier materials; paper and cardboard are not barrier materials, foils have to be classified depending on their material. In case of composite materials, the individual composite component and its layer thickness is decisive, this has to be considered individually for each case. Also included in the review of the migration potential is the issue of set-off in the stack or reel and with that the adhering printing, filling and packaging processes.

The determination of barrier properties and the migration potential are an important part of the information and communication process. In general, a risk assessment is only possible within the compilation process of the specification. A concrete risk assessment can only be done by individual tests (packed food under consideration of storage conditions and shelf life).

All information from the supply chain regarding the evaluation of the entire system and the interaction of individual components during use (food packaging in use) can finally be gathered at the user/food packer as, in the end, he is the one to carry responsibility. This means that the producers of the packaging and the packers have to agree on the time and execution of migration tests and delegate them, if necessary.

Annex

a) Types of packaging materials and packaging components

Packagings are composed of defined packaging materials. This means that, in general, they are made from composite materials and a number of different packaging components.

The table shows the most important materials according to the Annex of Regulation (EC) No 1935/2004 as well as a list of possible components. This information is not meant to be exhaustive.

- Paper, carton and board
- Plastics
- Glass
- Metals and alloys
 - Aluminum
 - Tinplate
 - Stainless steel
- Active and intelligent materials
- Regenerated celluloses
- Silicones
- Textiles
- Varnishes and coatings
- Waxes
- Rubber
- Wood

Table 3a): Type(s) of packaging material

- Closures
 - Screw cap/twist-off top
 - - Crown cap
 - Cork
- Sealing gaskets
- Labels
- Adhesives
- Sleeves
- Adhesive tape, sealing strip
- Tear-open thread
- Clips (plastics, metal)
- Strings
- Stickers
- Printing inks (dried film of printing inks), imprint

Table 3b): More packaging components

b) Important individual regulations regarding specific materials

The following list includes key regulations that have to be implemented into national legislation; these regulations have been further specified by numerous amendments:

- *Commission Directive 2005/31/EC of 29 April 2005 amending Council Directive 84/500/EEC as regards a declaration of compliance and performance criteria of the analytical method for ceramic articles intended to come into contact with foodstuffs*
- *Commission Directive 2007/42/EC of 29 June 2007 relating to materials and articles made of regenerated cellulose film intended to come into contact with foodstuffs*
- *Commission Regulation (EC) No 1895/2005 of 18 November 2005 on the restriction of use of certain epoxy derivatives in materials and articles intended to come into contact with food*
- *Commission Directive 2002/72/EC of 6 August 2002 relating to plastic materials and articles intended to come into contact with foodstuffs*
- *Council Directive 82/711/EEC of 18 October 1982 laying down the basic rules necessary for testing migration of the constituents of plastic materials and articles intended to come into contact with foodstuffs*
- *Commission Regulation (EC) No 450/2009 of 29 May 2009 on active and intelligent materials and articles intended to come into contact with food*

Currently a data base on food contact materials is being prepared on European level.
https://webgate.ec.europa.eu/sanco_foods/main/?sector=FCM&auth=SANCAS

It is intended to provide information on substances from all categories; currently the data base contains only substances to be used in plastics, separately listed by additives and monomers. The data base also allows access to legal regulations and EFSA opinions.

c) BfR recommendations

For some decades, the “Recommendation on health risks of plastics and other polymers” (so called Plastics Recommendation) has been nationally available from the German Federal Institute for Risk Assessment (BfR). These recommendations are aimed at fields for which no harmonized legal regulations are available.

The recommendations are based on expert opinions; they are not legal standards and thus not binding. However, they represent the current state of science and technology with regard to the requirements from Regulation (EC) No 1935/2004 (page 2). If substances contained in the list of the plastics recommendations are used for food contact materials, the producer can assume that they are compatible with the requirement that no substances shall migrate in unjustifiable quantities into the food. In the case that food articles and materials are produced deviating from the recommendations, the producer and user are solely responsible in case of possible objections based on food legislation issues.

XXXVI.	Paper and board for food contact
XXXVI/2.	Paper and paper board for baking purposes
XXXVI/3.	Absorber pads based on cellulosic fibers for food packaging
XXXIX.	Commodities based on polyurethanes
II.	Soft polyurethane foams as cushion packaging for fruit
LI.	Temperature resistant polymer coating systems for frying, cooking and baking utensils
I.	High polymers containing plasticizers
II.	Plasticizer-free polyvinyl chloride
III.	Polyethylene
V.	Polystyrene
VI.	Polypropylene
IX.	Colorants for plastics and other polymers used in commodities
X.	Polyamides
XI.	Polycarbonates
XIV.	Plastics dispersions
XV.	Silicones
XVI.	Polyvinyl ethers
XXI.	Commodities based on natural and synthetic rubber
XXV.	Hard paraffins, micro crystalline waxes and mixtures of these with waxes, resins and plastics
XXVI.	Cellulose acetate and propionate
XXVIII.	Cross-linked polyurethanes as adhesive layers for food packaging materials

Table 4: Excerpt from the “BfR Plastic Recommendations” (as per July 2010).

These recommendations are available as “Database BfR Recommendations on Food Contact Materials” on the internet. http://bfr.zadi.de/kse/faces/DBEmpfehlung_en.jsp

Added to that, there are resolutions from the European Council for individual fields (e.g. metals and alloys) which, however, are merely a register and not binding recommendations; they can be used for the assessment of food contact materials according to Article 3 of the Regulation (EC) No 1935/2004 only to a limited extent.

Material and product approvals issued by the FDA (US) are also only of restricted use for expert opinions because of the differing approaches to testing.

d) List of recommendations provided by associations and federations

Various national and European associations and federations have published recommendations and guidelines for fields not legally regulated on EU level.

- PlasticsEurope, Cefic-FCA and EuPC

Guidelines for Good Manufacturing Practice for Plastic Materials and Articles intended for Food Contact Applications

<http://www.plasticseurope.org>

- CEPE European Council of producers and importers of paints, printing inks and artists' colours

Code of Practice for Coated Articles where the Food Contact Layer is a Coating - Annexes II & III

<http://www.cepe.org/EPUB/easnet.dll/>

- Industrieverband Klebstoffe e.V. (IVK) (German Adhesives Association)

TKPV-1 Briefing note: Food contact status of adhesives/raw materials (May 2007)

TKPV-2 Briefing note: Adhesives for food contact materials (June 2007, in the German language only)

TKPV-3 Briefing note: Hygiene Guide for adhesives for use in the food industry (January 2006)

TKPV 4 Briefing note: Guideline: Good Manufacturing Practice for adhesives for the production of food contact materials (July 2007, in the German language only)

http://www.klebstoffe.com/index_02.htm

- Confederation of Paper and Board Converters in Europe (CITPA)

Industry Guideline for the Compliance of Paper and Board Materials and Articles for Food Contact

<http://www.citpa-europe.org>

- European Aluminium Association

Good manufacturing practice for aluminium alloy semi and end products intended to come into contact with foodstuff

<http://www.eaa.net/en/publications/food-contact-good-manufacturing-practice/>

- EuPIA European Printing Ink Association / VdL German Printing Ink Industry Association

- *Information leaflet: Printing Inks for Food Packaging (February 2009)*
- *EuPIA Guideline on Printing Inks applied to the Non-food Contact Surface of Food Packaging Materials and Articles (September 2009)*
- *Good Manufacturing Practices for the Production of Packaging Inks Formulated for Use on the Non-Food Contact Surfaces of Food Packaging and Articles intended to Come into Contact with Food (March 2009)*
- *Customer Information Note regarding the use of sheet fed offset inks and varnishes for the manufacture of food packaging (February 2009)*
- *FAQs regarding the Legal Status of Printing Inks applied to the Non-food Contact Surface of Food Packaging Materials and Articles (May 2007, in the German language only)*
- *Information Leaflet on Printing Inks and Varnishes intended to Come into Direct Contact with Foodstuffs (May 2007)*

<http://www.druckfarben-vdl.de/>

<http://www.eupia.org>

EXAMPLE

Packaging specification

Company/supplier

Customer details:

Name

Address

Customer ID

Article:

Product name

Article number

General arrangements:

- *Integral part of the applicable terms and conditions of purchasing, contract and delivery*
- *Valid when signed by the parties concerned (customer and supplier)*
- *Relevant modifications in terms of technological properties and composition and/or processing conditions require the written consent of the parties concerned*
- *Agreements on system certificates (hygiene management system, QM, IFS)*
- *General information on the compliance with relevant legislation*

Special arrangements:

- *Compliance with specific regulations (EU, third country)*
- *Reference to recommendations/guidelines*
- *Limitations of use*
- *Information on composition*

- *Reservation of the right to test*
- *Delegation of tests*

Page 1 of 2

Validity entry/revision status

EXAMPLE

Product description

Type of packaging

- Packaging coming into contact with food*
- Packaging not coming into contact with food*

Intended content

- *type of food product*
- *capacity*

Other system components

- *closures*
- *inner liner*
- *secondary containers*
- *labels*

Construction/dimensions/layer thickness

Machineability

Filling/packaging conditions

Storage conditions (including packed good)

- *intended storage period*
- *storage temperature*

Printing process

- *printing inks*
- *printing materials*

Adhesives

Storage conditions for packagings/packaging materials

- *palletizing*
- *environment/temperature*
- *periods of use*

Sampling

Agreement on tests

- *strengths*
- *vapor/gas permeability*
- *strength of the sealed seam*
- *adhesive properties*
- *migration properties*
- *sensory properties*
- *microbiology*

Certificates/declaration of compliance/drawings

Page 2 of 2

Validity entry/revision status

Signatures:

Customer

Supplier