

Components Guidelines – Recognition of Aromas

When manufacturing “Ohne Gentechnik” foods, Sections 3a and 3b of the EC Genetic Engineering Implementation Act (EGGenTDurchfG) must be fulfilled; that is to say, only such ingredients that are not GMOs, do not contain GMOs and are not made from GMOs may be used. In general, adventitious or technically unavoidable traces of genetically modified material are tolerated up to a threshold of at most 0.1 % per ingredient. Furthermore, no processing aids or other substances¹ within the meaning of Sec. 3, Par. 5 EGGenTDurchfG that are produced with genetically modified organisms and/or must be labelled pursuant to Regulations (EC) No. 1829/2003 or 1830/2003 may be used.

Food and ingredients of animal origin are only permissible if they are certified under the VLOG Standard or a different [Standards recognised as equivalent](#).

Aromas are considered ingredients according to the requirements of EGGenTDurchfG, regardless of the concentration used in the food.

How is the use of carriers and solutions regulated in EGGenTDurchfG?

Only 10-20 % of an aroma's components are aromatic. The rest are carriers and solutions (lactose, starch, dextrose etc.) that make it easier to process aromas in food. Carrier substances of aromas in the quantities strictly necessary are not ingredients of the finished product within the meaning of food genetic engineering law.² Nevertheless, aromas that are not intended for sale to the end consumer and all substances or materials therein must be identified with their name or, if necessary, with their E-number.³

For manufacturing or processing “Ohne Gentechnik” products, aromas with processing aids or other substances¹ within the meaning of Sec. 3, Par. 5 EGGenTDurchfG may be used only if these substances were not produced with GMOs. Furthermore, according to the VLOG Standard, the aromas must not be used if the other substances therein are labelled pursuant to Regulations (EC) No. 1829/2003 or

¹ Pursuant to Sec. 3, Par. 5 EGGenTDurchfG in conjunction with Sec. 5, Par. 2 Lebensmittel-Kennzeichnungsverordnung [Food Labelling Regulation] in its version dated 18 December 2007 (regardless of the fact that, in the meantime, it has been replaced by the essentially identical Art. 20 of Regulation (EU) 1169/2011) this includes:

- Components of an ingredient that were temporarily removed during manufacturing and then added back into the food without exceeding their original quantity
- Additives, aromas, enzymes and microorganism cultures that were contained in one or more ingredient of a food, as long as they no longer have a technological effect in the final product
- Solutions and carrier substances for additives, aromas, enzymes and microorganism cultures, as long as they are used only in technologically necessary quantities
- Extraction solvents
- Substances used in the same way and for the same purpose as processing aids and which are present in the finished product, even in an altered form

² Art. 2, No. 13 Regulation (EC) No. 1829/2003 in conjunction with Art. 6, Par. 4 c) iii) of Directive 2000/13/EC and Art. 2, Par. 2 f), Art. 20 c) and Art. 53 of Regulation (EC) No. 1169/2011.

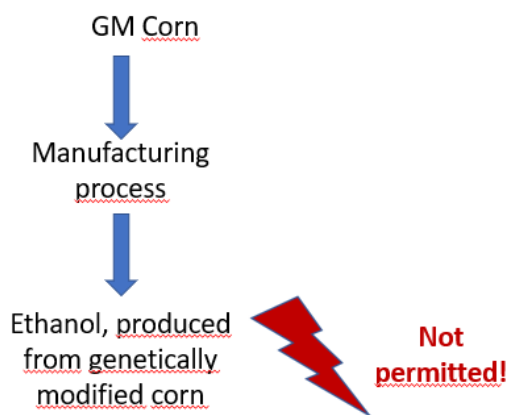
³ Art. 15, Par. 1e) ii) of the EC Flavouring Regulation 1334/2008.

1830/2003 or if they would have to be so labelled were they placed into circulation (A 1.4 of the VLOG Standard).

For carrier substances contained in aromas, including solutions that are used only in the quantities strictly necessary, the following applies:

- They must not have been produced by GMOs
- They must not be labelled with a reference to GMOs (e. g. “contains GMOs” or “produced from GMOs”)
- If the carrier substances or solutions were produced by the user himself, they must not have to be labelled with a reference to GMOS if they were placed into circulation

Example: Ethanol from carrier substance



The EGGenTDurchfG does not impose any requirements for the source material of ethanol used as a carrier substance of an aroma, the only condition being that ethanol must not be produced from GMOs (Sec. 3a Par. 5 EGGenTDurchfG). According to the VLOG Standard the aroma, however, must not be used if it follows from the label that the ethanol is produced from GMOs. The same applies if the user has produced the aroma himself and thus knows that the ethanol is produced from GMOs and the ethanol would thus have to be labelled accordingly if it were brought into circulation.

May natural aromas be used in “Ohne Gentechnik” products?

For natural aromas to be permissible in “Ohne Gentechnik” products, the raw materials and the manufacturing process must be critically assessed. Natural aromas are obtained from raw plant or animal materials by means of physical (extraction, distillation), enzymatic or microbiological (fermentation) methods.⁴

The raw materials used must not be GMOs, contain GMOs or be made from GMOs. In addition, raw animal materials must come from animals for which the minimum feed period with feed that is not subject to labelling according to the annex of EGGenTDurchfG was fulfilled.

Biotechnological methods, in which generally solutions of sugar-containing microorganisms are converted into aroma agents, are often used to manufacture natural aromas. These aroma agents can subsequently be isolated. It must be ensured that no GMOs were used during this manufacturing process. Another method is to directly add enzymes to the microorganisms. According to

⁴ Cf. Art. 3, Par. 2 c) and Art. 16 of Flavouring Regulation (EU) No. 1334/2008.

EGGenTDurchfG, Section 3a, Par. 5, foods, food ingredients, auxiliary substances and other substances must not be produced from GMOs. Therefore, it must be ensured that the enzymes added were not produced from genetically modified microorganisms.

To what extent do the 5 % of so-called 95/5 aromas fall under EGGenTDurchfG?

For a natural aroma agent, the source of which is raspberry, for example, 95% of the aromas must come from the raspberry indicated. The remaining 5 % consists of other natural aromas and is used for standardisation or as a nuance. The requirements of EGGenTDurchfG must be fulfilled for both the 5 % and the 95 % of the so-called 95/5 aromas.

Is it sufficient to confirm to clients that the aromas were manufactured without GMOs according to Regulations (EC) No. 1829/2003 and (EC) No. 1830/2003?

No. For foods to qualify for the “Ohne Gentechnik” label, the requirements go clearly beyond the labelling obligation according to Regulations (EC) No. 1829/2003 and No. 1830/2003. The requirements of EGGenTDurchfG must be met. Pursuant to the EGGenTDurchfG, processing aids and other substances that are not ingredients must not be produced from GMOs, either. Whosoever places the food on the market must provide evidence of this.

Therefore, a supplier’s declaration for the aroma and all components for which there is no labelling obligation according to Regulations (EC) No. 1829/2003 and (EC) No. 1830/2003 is not sufficient.

Are aromas with organic certification recognised for use in “Ohne Gentechnik” foods?

Organic foods may generally be labelled as “Ohne Gentechnik” if the requirements of EGGenTDurchfG are met. According to the EC Regulation on Organic Production, food including food additives and carrier substances such as processing aids may be used only if they do not contain GMOs and are not produced from or by GMOs.⁵ This must be proven by the seller by a corresponding confirmation.⁶

For use in “Ohne Gentechnik” foods, organic aromas must meet the provision of EGGenTDurchfG according to which adventitious or technically unavoidable traces of genetically modified material of at most 0.1 % per ingredient are tolerated. For organic products, adventitious or technically unavoidable carryover of up to 0.9% per ingredient is tolerated.

Proof of the permissibility of aromas in “Ohne Gentechnik” foods

If for all components of the aromas the requirements of EGGenTDurchfG are met, and the supplier provides a corresponding GMO-declaration (e.g. VLOG “[Annex 1 - GMO-Free Certificate](#)”), then the aromas may be used in “Ohne Gentechnik” products.⁷

⁵ Art. 11 of EU Organic Regulation No. 2018/848.

⁶ Cf. Art. 11, Par. 4 of EU Organic Regulation No. 2018/848.

⁷ Cf. Art. 30, Par. 4 of EU Organic Regulation No. 2018/848 in conjunction with Art. 12, Par. 2 of Regulation (EC) 1829/2003 and Art. 4, Par. 8 of Regulation (EC) 1830/2003.