



# PESTICIDES – QUESTIONS AND ANSWERS

---

## WHAT ARE PLANT-PROTECTING AGENTS/PESTICIDES?

The terms are often used interchangeably, whereby plant-protecting agents are products which protect crops from harmful organisms, inhibit undesirable growth of plants, or generally affect the life processes of plants. For more information, see: Regulation (EC) No. 1107/2009 Art. 2 Para. 1.

In contrast, the generic term "pesticide" also includes substances that are not directly applied to plants, such as biocides.

## HOW ARE PLANT PROTECTION PRODUCTS APPLIED?

Plant-protecting agents are chemical or biological active substances which are used, among other things, as herbicides, fungicides, insecticides, acaricides, plant growth regulators and repellents (defenses or deterrents) in agriculture or against storage pests. The agents are widely used worldwide to minimize damage to crops. In Germany and other countries, there are ever increasing broad public discussions on possible health risks of pesticides. For example, the agents are linked to bee mortality or other threats to biodiversity.

## WHAT RULES ARE APPLICABLE TO THE USE OF PESTICIDES?

For the evaluation, approval and application of pesticides, there are numerous European and national laws and regulations. Regulation (EC) No. 396/2005 and its annexes created a set of rules that applies across all EU Member States. It sets maximum residue limits as a combination of active substance and product. Some substances, such as synergists, continue to be subject to the German Regulation on maximum residue limits (RHmV).

For products from certified organic cultivation, the assessment is carried out in accordance with the EU Organic Regulation No. 889/2008 or on the basis of the specific tolerance values of the organic associations, such as the Federal Association of Natural Foods and Products e. V. (BNN).

## WHICH FOODS CONTAIN RESIDUES?

With the use of pesticides, occurrence of residues is not unlikely. This can also lead to multiple residues, since pesticides are used against various harmful organisms. Overall, however, the publications of the EU monitoring programs and the German monitoring suggest that exceedances of the maximum levels occur only in a few percent of the examined samples.

## ARE PRODUCTS FROM CONTROLLED ORGANIC PRODUCTION FREE OF PESTICIDES?

Ecological production methods differ from conventional methods. The difference is that organic farmers use multi-annual crop rotations or even resistant varieties instead of chemical compounds to control pests or weeds. In addition, if necessary, some herbal or animal products according to regulation (EC) 889/2008 are permitted in plant protection. Organic production cannot be guaranteed to be one hundred percent free of pesticides due to general environmental pollution or unintentional contamination (drift).

## WHICH FOODS AND WHICH ACTIVE SUBSTANCES SHOULD BE ANALYZED?

Please refer to our → [data sheet for information about pesticides – analysis and application](#)

If you have further questions, please contact us directly.

## WHY CAN NOT ALL ACTIVE SUBSTANCES BE DETERMINED BY A SINGLE METHOD?

Some pesticides have special, chemical and/or physical properties in terms of polarity and solubility. Others require special clean-up steps or derivatization during sample preparation. These preclude the detection using one of the common multi-methods. The individual or group methods used are specially optimized for these special properties to allow a safe and reliable determination of the substances.

## HOW ARE PESTICIDES ANALYZED AT SGS AND HOW CAN YOU EMPLOY US?

We analyze food or feed products according to different single and multi-methods. The sample matrix (like cereals, tea, high-fat products, etc.) plays an important role. In our → [data sheet for information about pesticides – analysis and application](#) you will find further information about which methods we use.

For simplified orders, you can request our order form. For price inquiries, please send us a short e-mail.

## WHAT TO BE CONSIDERED WHEN SAMPLING?

Proper sampling is a prerequisite for a valid analysis result. In general, a representative sample should be drawn across the batch or lot as existing pesticides do not need to be distributed homogeneously. For more information on sampling methods specifically for the control of pesticide residues, see → [Directive 63/2002/EC](#). There is also information given on the required size of the laboratory sample (sample amount). Please also refer to our → [data sheet samples for pesticide analysis – correct removal and dispatch](#)

## WHERE ARE SAMPLES TO BE SENT?

SGS INSTITUT FRESENIUS GmbH  
Building B5.2, EG (Sample Entry)  
Building B5.1 (Customer Service)  
Tegeler Weg 33  
10589 Berlin, Germany  
t +49 30 34607-700  
f +49 30 34607-710  
[de.food.berlin@sgs.com](mailto:de.food.berlin@sgs.com)

SGS INSTITUT FRESENIUS IS PART OF SGS, THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.

WHEN YOU NEED TO BE SURE

**SGS**