Cropprotection products

Een gewasbeschermingsmiddel is een preparaat met één of meerdere werkzame stoffen, die schadelijke organismen, zoals planten, insecten, bacteriën en virussen chemisch of biologisch moet bestrijden.

Agriculture and horticulture

A distinction is made between crop protection products used in agriculture and horticulture to safeguard crops, and biocides applied outside the agricultural sector.

Crop protection products are classified based on the type of organism they target — such as:

- Insecticides for insects, fungicides for fungi, herbicides for weeds, nematicides for nematodes, acaricides for mites, rodenticides for rodents, molluscicides for slugs and snails, bactericides to combat bacterial plant diseases.

Biocides, on the other hand, include disinfectants, antifouling paints for boats, insecticides, and wood preservatives.

Crop protection products in the environment

Crop protection products enter the environment both intentionally and unintentionally. Wind, rain, and leaching from soil contribute to the spread of these substances through groundwater and surface water.

Because many of these compounds are persistent, they can accumulate in the food chain. They are found globally across all environmental matrices and in organisms at every level of the food chain. Particularly in top predators, high concentrations are measured due to bioaccumulation.

The function of these products — to eliminate harmful organisms — also means they can negatively impact ecosystems and human health. The active ingredients are often not entirely specific, meaning they may harm non-target organisms alongside the intended pests.

Legislation

European Directive 91/414/EEC outlines the registration requirements for crop protection products. Before a product can be authorised in an EU Member State, its active substance must be included in Annex I of the directive. In addition, each Member State is responsible for assessing and registering the specific applications of the product. In the Netherlands, the Crop Protection Products and Biocides Act (Wgb) implements the European directive, with a focus on safeguarding human and animal health, as well as protecting the environment.

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The use of crop protection products is also restricted in designated drinking water extraction areas, as outlined in the Dutch Drinking Water Act. However, this legislation cannot fully prevent contamination of all drinking water sources.

Water companies that rely on surface water — such as the Rhine or the Meuse — often face elevated concentrations of crop protection products in raw water. As a result, these substances can end up in our drinking water.

This highlights the importance of cross-border collaboration at the European level to ensure the safety and quality of our drinking water.

In 2025, the Omgevingsdienst West-Holland became the first regional environmental agency in the Netherlands to introduce a new operational framework for soil investigations targeting non-regulated crop protection products. Several other environmental agencies have since adopted this approach.

The framework includes a prioritised list of 20 substances — including glyphosate, metamitron, difenoconazole, mancozeb (classified as SVHC: substances of very high concern), and thiacloprid (SVHC).

It recommends a sampling strategy that accounts for leaching behaviour, variability in soil layers, and human health risks. In situ measurements of parameters such as pH, redox potential, and electrical conductivity (EC) are essential to avoid underestimating risks and creating a false sense of safety.

Our offer

Eurofins offers an extensive analytical portfolio, covering more than 450 components to detect the most commonly used crop protection products in soil and water.

By applying advanced analytical techniques — such as liquid chromatography with tandem mass spectrometric detection (LC-MS/MS) and gas chromatography with tandem mass spectrometric detection (GC-MS / GC-MS/MS) — we are able to measure compounds at extremely low reporting limits.

Our laboratories continuously update their analytical offering by identifying emerging substances across various matrices and developing sensitive methods to detect them. All methods are thoroughly validated, ensuring reliable results for our clients.

Many of these analyses are also accredited by the Dutch Accreditation Council (RvA).

For soil investigations aligned with the new Dutch framework for non-regulated crop protection products, Eurofins provides specialised support — helping to ensure accurate risk assessment and avoid false safety assumptions.

About Eurofins Environment Testing

Eurofins Environment Testing Netherlands is part of Eurofins Scientific and your partner for environmental testing.

Our goal is to help you achieve your objectives. With efficient and qualitative analysis techniques we support your business processes. Our customer service is at your disposal with specialized knowledge and extensive experience. You can make use of our own packaging and logistics service. Our reliable couriers take care of sample transfer on site and transport the samples to the relevant laboratory the same day.

Eurofins Environment Testing Netherlands is committed to protecting the environment. With our products and services, we support the responsible use and minimization of substances harmful to humans and the planet. Examples include hormones, pesticides, dioxins and heavy metals. By reducing the usage of water, raw materials and energy, we contribute to sustainability. Our laboratories have developed special programs to minimize environmental risks, such a safe use of chemicals and waste disposal.

Different types of crop protection products

Crop protection products can be classified based on their chemical composition. Eurofins is equipped to analyse a wide range of these product types, including but not limited to:

- Anilides
- Carbamates
- Carboxamides
- Chlorobenzenes
- Phenoxy compounds
- Phenylureas
- Organochlorines
- Organophosphates
- Organonitrogen compounds
- Pyrethroids
- Triazines

More information

Samples can be collected either on-site or from a designated depot. To arrange this, please contact our logistics department via 0800-0991180 or logistiek@eurofins.com.

For more details about our analyses, reporting, pricing, turnaround times, and services, please contact your Eurofins representative or reach out to our customer service team during office hours.

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