Food Safety
along the food supply chain

Residues & Contaminants
Food can come in contact with residues and contaminants along the entire supply chain. Pesticides, veterinary drugs, but also solvents, are generally applied under controlled conditions during food production processes and may remain as residues in final products.

Contaminants may enter food products via the environment or the manufacturing process, can be formed during manufacturing as process contaminants, or they can migrate into the food from food contact materials, e.g. packaging.

Storage protection agents
Sprout suppressants
Mycotoxins

Fumigants
Mineral oils

Pesticides
Dioxins, PCBs
Veterinary drugs
Mycotoxins, Metals

Soil analysis
Pre-harvested samplings

Storage
Transport
Raw materials
Cultivation

Supply chain control
Risk and crisis management
Audits
Method development

Production
Process contaminants
Detergents
Solvent residues
PAHs, Mineral oils, PCBs

Packaging
Plasticisers
Migration residues
Mineral oils
Anthraquinone, Biphenyl

Marketability
Food law assessment

Trade
Compliance check
Traceability

Compliance Check
Rückverfolgbarkeit
Lebensmittelrechtliche Beurteilung

Audits Method development
The Eurofins Solution for Residues & Contaminants

Fast and reliable laboratory analysis
From fast screening methods to cost-effective multi-methods and express analyses: Our laboratories specialising in residue and contaminant analysis are capable of responding to continuously changing legal and market requirements as well as customer needs. Using state-of-the-art technology, our specialised laboratories develop new methods and provide high laboratory capacities in times of crisis.

Personal advice according to the latest scientific knowledge
We keep our knowledge up to date by continuously exchanging experience through memberships in national and international professional organisations, committees and associations as well as by cooperating with leading research institutes. Our structure of internationally networking competence centers allows direct on-site customer support with access to the entire range of services of residues and contaminants.

Customised quality concepts
Our industry experts advise you on quality concepts along the entire supply chain. In order to ensure required quality standards we compile tailor-made monitoring and sampling plans for your products and raw materials, or support you in your risk and crisis management.

Complete analytical portfolio of residues and contaminants
Short turn-around-times by applying express service: 24h, 48h
High capacities even in crisis situations
Efficient multi-methods

Individual monitoring programmes
Practice-oriented legal assessment of results
Global sampling and supplier audits
Risk and crisis management
## Competence Center for Residues & Contaminants

<table>
<thead>
<tr>
<th>Pesticides</th>
<th>Veterinary Drugs</th>
<th>Metals</th>
<th>Organic Contaminants</th>
<th>Environmental Contaminants</th>
</tr>
</thead>
<tbody>
<tr>
<td>- More than 50 years of experience in pesticide analysis</td>
<td>- Portfolio of more than 250 veterinary drugs</td>
<td>- Heavy metals and trace elements</td>
<td>- Process contaminants, organic residues, illegal additives etc.</td>
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<tr>
<td>- Individual test scopes depending on product types and specification</td>
<td>- Risk-oriented test scopes</td>
<td>- Ultra low quantification limits by ICP-MS/MS</td>
<td>- Analysis and consulting along the entire supply chain</td>
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<tr>
<td>- Cost-effective group-methods and multi-screenings</td>
<td>- Multi-screenings of more than 100 veterinary drugs</td>
<td>- Special parameters such as radioactivity and element species</td>
<td>- Constant adaptation of the portfolio to current developments</td>
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- Detection of regulated and rare mycotoxins and plant toxins
- Representative sampling
- Homogenisation of large sample quantities

- World's leading dioxin and POPs laboratory
- Complete scope of dioxins, PCBs, POPs (Stockholm Convention)
- Detection possible in food and human samples in the ultra trace range
## Analytical Scope*

### Residues & Contaminants

#### Pesticides
- Multi-methods: QuEChERS / DFG-S19
- Dithiocarbamates
- Glyphosate
- Ethephon
- Bromide
- Perchlorate / Chlorate
- Trimesium (Trimethylsulfonium)
- Phenoxy carboxylic acids
- Paraquat / Diquat
- Guazatine
- Fosetyl / Phosphonic acid

#### Mycotoxins & Plant Toxins
- Aflatoxins
- Ochratoxin A
- Deoxynivalenol
- Zearalenone
- Fumonisins
- T-2 / HT-2 toxin
- Patulin
- Alternaria toxins
- Ergot alkaloids
- Pyrrolizidine alkaloids
- Tropane alkaloids
- Rare mycotoxins

#### Metals
- Heavy metals and elements from A-Z
- Trace elements
- Inorganic arsenic
- Radionuclides

### Completely safe

### Organic Contaminants
- Acrylamide, Furan
- MCOP (esters), Glycidyl esters
- Polycyclic aromatic hydrocarbons (PAHs)
- Mineral oil hydrocarbons (MOSH / POSH / PAO / MOAH)
- Aromatic hydrocarbons (BTEx)
- Plastisiers
- Migration residues
- Sudan dyes and other illegal dyes
- Solvent residues

### Environmental Contaminants
- Dioxins (PCDD/Fs)
- Polychlorinated biphenyls (PCBs)
- Flame retardants (e.g., PBDEs, HBCD, TBBPA)
- Perfluorinated chemicals (PFCs)

### Veterinary Drugs
- Antibiotics
- Antiparasitics
- Hormones
- Non-steroidal anti-inflammatory drugs
- Tranquilisers

* This list of parameters is an excerpt of our range of services.

### Further Expertise

- Meat and fish
- Animal feed
- Fats and oils
- Beverages
- Milk and dairy products
- Grains and cereals
- Baked goods
- Coffee
- Herbs, tea and spices
- Nuts and dried fruits
- Fruits and vegetables
- Confectionary
- Convenience
- Baby food
Competence in every Detail

Benefit from Eurofins’ outstanding knowledge on residues and contaminants. We will gladly advise you on convincing solutions.

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