

Service Specification for the analyses of Herbs and Spices

Herbs and Spices play a key role in the food industry as flavouring ingredients. To ensure quality and safety of these partially sensitive and high-priced harvested products, the compliance with strict guidelines is essential.

As an industry laboratory for herbs and spices, Eurofins is committed to offer the latest know-how and innovative analytical techniques. Through continuous cooperations with specialists in relevant organisations, participation in related committees and collaboration with research institutes, our qualified contact persons are always up to date with the latest science and technology.

Special Analysis for Herbs and Spices

- Natural ingredients, e.g. coumarin, piperine, capsaicin, cresol, vanillin and ethylvanillin
- Authenticity (NMR profiling, PCR DNA Sequencing /Metabarcoding)
- Aroma components
- Essential oils
- Sulphurous acid
- Irradiation
- Allergens
- Colour value (ASTA)

Residues and Contaminants

- Pesticides
- Heavy metals and elements
- Fumigants, e.g. ethylene oxide, methyl bromide, phosphane
- Mycotoxins and biotoxins, e.g.
 - Aflatoxins
 - Ochratoxin A
 - Alternaria toxins
 - Pyrrolizidine alkaloids
 - Tropane alkaloids
- Sudan dyes and other illegal dyes
- Organic contaminants
 - Polycyclic aromatic hydrocarbons (PAH)
 - Mineral oil hydrocarbons (MOSH/POSH MOAH)
 - Solvent residues
 - Dioxins, furans and polychlorinated biphenyls
 - Nicotine, 3-MCPD, acrylamide

Microbiology and Hygiene

- Analyses according to microbiological requirements also of international expert committees and associations (e.g. DGHM, THIE)
- Total plate count
- Indicator organisms
 - Enterobacteriaceae
 - *E.coli*
- Biodegradation
 - Yeasts, moulds
- Pathogenic germs
 - Salmonella
 - *Bacillus cereus*
 - Spores of sulphite-reducing clostridia

Further Analyses and Services

- Radioactivity
- Genetically modified organisms (GMOs)
 - Screening, identification and quantification of GMO constituents
- Detection of botanical contamination
- Organoleptic assessment
- Nutritional values
- Food law assessment
 - Pesticide assessment according to EU regulations and BNN orientation value (international assessment on request)
 - Marketability
 - Labelling test
 - Toxicological evaluation (e.g. ARfD calculation)
- Sampling in the origin
- Consultation on operational hygiene

Other parameters are available on request via service@eurofins.de.