



Nuts & Dried Fruits

Analytics for Quality and Safety – from Sampling to Marketability Assessment

The AGROLAB GROUP supports you in the quality assurance of nuts and dried fruits – from sampling to result interpretation. Our specialist labs AGROLAB Dr. Verwey (NL) and AGROLAB LUFA (D) bring decades of experience in routine testing of these products.

Nuts, oil rich seeds and dried fruits

Nuts and oil rich seeds are an integral part of the diet in many countries. They supplement a balanced diet with many valuable fats and trace elements.

The preservation of fruits by dehydration has a long tradition. Through the drying process the fruits not only become robust against many typical spoilage organisms, but also flavors become more concentrated and pronounced.

Analysis of residues and contaminants

Possible contamination and undesirable residues can have a wide variety of causes. Fumigants are used to control pests, moulds and fungi during storage and transportation to ensure product safety and quality. Pesticides are used during the growing season to protect nuts and dried fruit from pests, weeds and diseases, increasing yield and quality while ensuring the crop is safe for consumption.



Your Plus:

AGROLAB is your competent analytics partner for nuts and dried fruits:

- + Decades of experience at our competence centres AGROLAB Dr. Verwey B.V. and AGROLAB LUFA GmbH
- + Support in designing risk-based testing plans with clear and detailed marketability assessments
- + High flexibility and speed in time-critical analyses (Port of Rotterdam, Antwerp, Hamburg)
- + Accredited sampling by AGROLAB Dr. Verwey in the Netherlands and Belgium; in other European countries by certified partners
- + Well-connected experts and active participation in international expert and standardisation bodies ensure your knowledge advantage:
- + Member of the International Nut and Dried Fruit Council (INC)
- + Member of the Waren-Verein der Hamburger Börse e.V.
- + Recognised laboratory for BNN, QS and Fruitmonitoring



Range of analyses for nuts and dried fruit

Contaminants and residues

- + Mycotoxins
 - Aflatoxins
 - Ochratoxin A
 - Alternaria toxins
 - Fusarium toxins
 - Patulin
- + Pesticides
- + Fumigants (ethylene oxide, methyl bromide)
- + Mineral Oil Hydrocarbons (MOSH & MOAH)
- + Polycyclic aromatic hydrocarbons (PAH)
- + Heavy metals including nickel
- + Sulfur dioxide
- + Hydrocyanic acid
- + Allergens

- + Solvent residues (e.g. BTXE)
- + PFAS
- + Radioactivity

Physical and sensory analysis

- + Foreign matters
- + Trade specifications
- + Descriptive examination

Quality parameters and fat indices

- + Moisture
- + Free fatty acids (FFA)
- + Peroxide value
- + Oil content
- + Label checks and nutritional values

Microbiology

- + Microbiology acc. to DGHM e.g. total aerobic count, yeasts and moulds, salmonellae, E. coli, B. cereus and more



However, they require careful regulation and testing to ensure that residue levels remain within safe limits for consumers.

Due to the specific climatic conditions in many countries of origin, nuts and dried fruits are at increased risk of fungal contamination. It is not uncommon for mycotoxin levels to be close to the EU's maximum values. Because of the larger particle size and inhomogeneous distribution of contaminants in nuts and dried fruit, a correct and representative sampling is of particular importance. It is advisable to have this done by experienced service providers. We will be happy to support you with this.

Sensory and microbiological properties

Depending on the agricultural production standards, drying processes, storage and transport conditions, nuts and dried fruit may show qualitative defects. In addition, insect infestation and foreign odours can also reduce the quality of nuts and dried fruit. Our experts support you in the analysis of fo-

reign matters and the assessment of trade specifications with profound knowledge in commodities knowledge and sensory analysis.

In the field of microbiological testing, our labs provide comprehensive support including the determination of the total aerobic count, yeasts and moulds, salmonellae, E. coli, B. cereus and other relevant microorganisms. The evaluation process is conducted in accordance with either customer specifications or the well-recognised recommendations of the German Society for Hygiene and Microbiology (DGHM). All tests are performed in accredited laboratories using validated methods, tailored to your product and market requirements.

Personal and competent support

Your personal and qualified contact at the laboratory will support you competently and confidentially with all questions related to your orders and products. Regional sales representatives are also available to assist you with any service-related questions.

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For questions and explanations, please contact your regional sales representative directly. You can find your contact person at www.agrolab.com in our contact finder. He/she will be happy to assist you and will provide you with an offer tailored to your needs.



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