

ENHANCING PET FOOD QUALITY

Apply our accurate method
and benefit from our
longtime experience
and knowledge

MIXING
ACCURACY
ANALYSIS

CARRY-OVER
ANALYSIS

Direct
Fast
Simple
On-site

Tested + approved!
Integrated within GMP+
Quality Assurance System



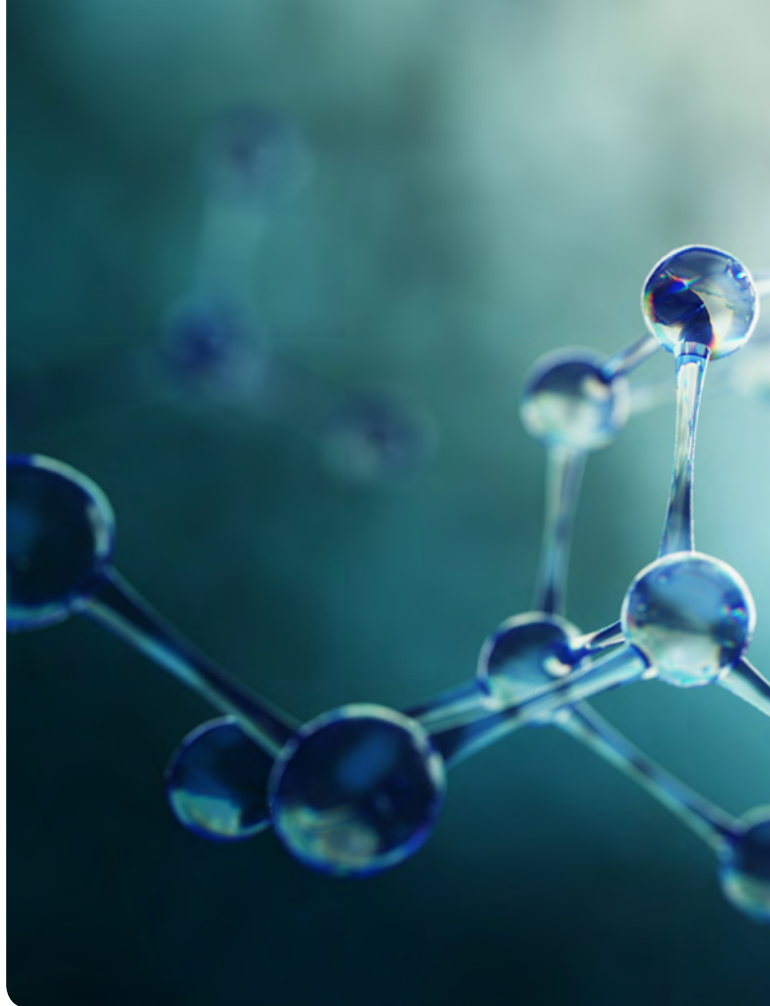
MTSE

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Frequent analysis of homogeneity and carry-over is needed to guarantee product safety and excellence for consumers in the pet food industry.

Accurate mixing

High quality pet food is characterised by homogeneity and the assurance that each pet gets all the micro-ingredients, such as vitamins and minerals, specified to the consumer. Therefore, as well as ensuring excellent mixing, pet food producers should pay attention to carry-over in their plant of ingredients from one batch to another and conduct frequent analysis of process performance with respect to both these aspects in each production line.

Pet food companies usually produce various products in one production line. Excellent homogeneity is required to reduce the risk of a deficit or excess amount of any micro-ingredient in the food. Mixing accuracy is also a pre-condition for reducing carry-over, or cross-contamination of material or product from one batch to another in a production line.



Health risks

Failure to avoid carry-over of compounds could carry risks of health complications in animals, or even disease. For example, carry-over of the antibiotic salinomycin into pet food vitamin and mineral premixes caused illness and deaths in 21 cats in 1996 that ate dry pet food contaminated with this toxic material.

Regular checks

To guarantee product quality and safety, it is therefore essential to conduct carry-over and homogeneity studies to check mixing properties and carry-over in mixers and other production parts. Identification of a source of inhomogeneity and carry-over enables corrective action to be taken and the adjustment of equipment to eliminate the problem.

Nowadays, recommendations from authorities in many countries and the GMP+ directive demand a regular check for all production lines with regard to homogeneity and carry-over every two years (BAOZ control of residues, version 1st July 2017).

Using microtracers

Several indicator substances are typically used to measure homogeneity. Microtracers have successfully been used since 2006 and represent a major improvement over traditional analytics with cobalt or manganese.

Microtracers are irregular shaped iron particles, coated with registered food dyes. Simply added to the mixer they have practical advantages – they are stable, robust, non-toxic and versatile and can be re-used for each batch of feed. This simple, fast, direct method provides accurate analysis and is applicable in raw meat, making it ideally suited to pet food production.

Expert analysis

MTSE (Micro Tracers Services Europe GmbH) is specialised in the performance, analysis and reporting of studies based on Microtracers. It has many years of experience in supporting manufacturers in guaranteeing high quality in pet food with tests of mixing accuracy and carry-over and offers a wide array of services from know-how transfer to support on-site, such as sampling and analysis on-site and training of employees. The analytical procedure is carried out for customers using a Rotary detector® and the reliable counting software Traco® image assessment.

In future, the demand for high quality pet food will increase and the Microtracer method as a routine method for check of mixing accuracy and carry-over will thereby support manufacturers in building trust in their pet food products. ♦



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