

# YOUR PARTNER IN GMO DETECTION



**TNO** triskelion bv

TNO Triskelion is a contract research organisation active in toxicology, analytical research and chemical risk assessment. The mission of TNO Triskelion is to guarantee the quality and safety of food ingredients, food products, chemical substances and pharmaceutical products. TNO Triskelion is a trusted partner for the food industry, offering fast and reliable services for the quantified detection of Genetically Modified Organisms. Both DNA and protein traces can be detected using Real Time PCR and immunology technologies.

#### **VERIFICATION OF THE ABSENCE OR PRESENCE OF GMO CROPS AND DERIVED PRODUCTS**

The introduction of GMO crops and derived products into the food production chain has led to consumer concerns and has resulted in legal regulations in Europe dictating the labelling of food products. Food components such as starches and oils are refined products and may be present in relatively low quantities in the final product. This refinement calls for sensitive methods to demonstrate the presence of raw materials of GMO origin. Testing on GMO is routinely performed within TNO Triskelion using technologies such as Real Time PCR for DNA detection to identify traces of transgenic soy and maize DNA. We have successfully applied PCR to demonstrate the presence of GMO DNA in several types of products such as protein isolates, lecithins, starches, syrups and oils. The technology has been

applied to food (vegetarian burgers and schnitzels, tofu, egg rolls, cakes, biscuits) and animal feed.

#### **GMO QUANTIFICATION**

Our GMO detection includes standard quantification enabling food companies to comply with current legislation that requires the labelling of foods containing more than 0.9% ingredients of GMO origin. TNO Triskelion communicates the test results to clients in single-page reports, following a format acceptable for legislative authorities. Additionally, we offer support to the food industry in fulfilling traceability requirements. Our high-quality standards are a distinctive feature of our work..



#### **TAILOR MADE PROJECTS AND METHOD DEVELOPMENT**

We have been involved in numerous projects to identify or clarify the strain which represents the genetic modification. This can be of particular value in suspected patent infringement situations, but also to verify authenticity or falsification of materials. We also can be of service where you need an independent validation report of a newly developed GMO detection method,

#### **TNO TRISKELION IS TOP PERFORMER IN GEMMA® SCHEME**

For several years, TNO Triskelion has been participating in the Genetically Modified Material Analysis Scheme (GeMMA®). This participation demonstrates the accuracy and robustness of our standard testing procedure: we obtain results which are always very close to the mean result of all participating labs. TNO Triskelion chairs the Dutch working group on the normalisation of GMO testing procedures and is involved in the certification of products and systems. GMO testing at TNO Triskelion is accredited under ISO/IEC 17025: 1999.

#### **SPECIAL CUSTOMER SERVICES**

TNO Triskelion provides special services if you need your test results at very short notice. For these situations, you need a dependable partner able to provide you quickly with reliable information. Our Emergency Response Service (ERS) is available for those situations on a 24/7 basis. More information on ERS can be found at [www.emergencyresponseservice.nl](http://www.emergencyresponseservice.nl).

## **WWW.TRISKELION.NL**

#### **TNO TRISKELION BV**

TNO Triskelion is a contract research organization active in toxicology research, analytical chemistry and chemical risk analyses. The mission of TNO Triskelion is to guarantee the quality and safety of food ingredients, chemical substances and medicines. TNO Triskelion is a subsidiary of TNO, the Netherlands Organisation for Applied Scientific Research.

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