



SGS PESTICIDE RESIDUE TESTING

ENSURING PRODUCT COMPLIANCE TO MAXIMUM RESIDUE LEVELS (MRLs)

The food industry has a responsibility to monitor and control the growing use of pesticides each year. This control is vital to protect the health of consumers, agricultural workers and the environment. Yet, keeping up to date with new international regulations and maximum residue levels (MRLs) for food products is a challenge for any food supplier. SGS Pesticide Residue Testing offers you a worldwide network of laboratories to identify and control your pesticide hazards. Based on our experience we offer expert advice on the range of pesticide residues recommended for screening in your product. Through our farm audits, review of applications and withholding periods, and scheduled food product testing, you can trust in SGS to ensure your products comply with all required pesticide residue regulations.

THE RISKS FROM PESTICIDE RESIDUES

Pesticides are chemical or biological products, which have been specifically developed for controlling pests, weeds and diseases. The over-use of pesticides can lead to dangerous levels of hazardous chemical residues entering the food supply chain. Residues may end up in fresh, frozen, and canned fruit and vegetables; in processed food and drink made from crops; and fresh or processed animal products.

Common pesticides include:

- Fungicides: to control mould & fungus
- Herbicides: to control weeds
- Insecticides: to protect against or control insect infestations
- Molluscicides: to control slugs and snails
- Rodenticides: to control rats and mice

EFFECTS ON HUMAN HEALTH

Consumption of pesticide residues has been linked to several adverse impacts on human health, including cancer, effects on the body's nervous and endocrine system; and irritation to skin and eyes. In order to protect consumers, maximum residue levels (MRLs) permitted in food products have been set by food safety legislation in many countries. To retain consumer confidence in your products, a comprehensive testing program can verify that your products meet MRLs and the safety standards they represent.

We test for over 500 possible residues, across a wide variety of food products:

- Baby Food
- Beverages
- Cereals
- Dairy
- Fats and Oils
- Fish
- Fruit
- Herbs and Spices
- Meat
- Ready-to-Eat Food
- Vegetables



POLICIES AND REGULATIONS

With the increase of consumer concern about the hazards of pesticides, and the risks posed to farmers and the environment, many supermarket chains and food manufacturers, governments and non-governmental agencies, are implementing policies and processes to monitor and reduce residues, including: Good Agricultural Practices (GAP), GLOBALGAP standard and Good Manufacturing Practices (GMP).

In addition to these, the Codex Alimentarius Commission (CAC) is an intergovernmental body, which consists of 185 Codex Members (184 Member Countries and 1 Member Organisation (EU), which operates within the framework of the Joint Food Standards Programme. This programme was established by the Food and Agriculture Organisation of the United Nations (FAO) and the World Health Organisation (WHO), who adopted a voluntary set of standards for pesticides control: The International Code of Conduct on the Distribution and Use of Pesticides; which has the purpose of protecting the health of consumers and ensuring fair practices in the food trade.

In 2008, the European Food Safety Authority (EFSA) harmonised EU MRLs.

To learn how SGS can help you with Food Allergen Testing, visit www.sgs.com/foodsafety or contact foodservices@sgs.com for more information.

The harmonised MRLs are now applicable for all active substances used in plant protection products that may enter the food chain. While in the USA, the Environmental Protection Agency (EPA) sets MRLs (also known in the US as, tolerances) for pesticides that can be used on various food and feed commodities.

SGS PESTICIDE RESIDUE TESTING

With so many policies and standards both nationally and internationally, anyone involved in the food industry needs to be sure of accurate and up-to-date information on pesticides regulations. We have established a worldwide network of laboratories, where we meet best testing practices for agro-chemicals according to various monitoring, inspection and regulatory requirements. Using state-of-the-art technology, our skilled technicians test across a wide variety of products so you can trust in your products' safety at all stages of production or consumption

We test for pesticide residues using the following:

- **Liquid Chromatography - Mass Spectrometer Coupled (LC/MS-MS)**
- **Gas Chromatography - Mass Spectrometer Coupled (GC/MS-MS)**

THE BENEFITS

With SGS Pesticide Residue Testing you have access to our expert teams, who have extensive knowledge of all areas in the food industry. We provide the testing you need, wherever you operate within the food chain, to ensure your product compliance with the standard you require. Our global presence means we can ensure your products are safe to market, and safe in production, reducing risk to everyone involved in your global food chain.

WHY SGS?

SGS is the world's leading inspection, verification, testing and certification company. Recognized as the global benchmark for quality and integrity, we employ over 67,000 people and operate an international network with over 1,250 offices and laboratories around the world.

SGS provides a comprehensive suite of solutions to the food industry combining audits and certification, testing and analysis, inspection, training and technical services.