

# ANALYTICAL SERVICES PESTICIDE RESIDUE & CONTAMINANTS

SGS North America's Agricultural Services laboratories have the equipment and experience to service your complete food and feed testing needs. With cutting edge technology and the latest testing methods, SGS laboratories are fully equipped to meet your needs. Our trained scientists and technicians hold Ph.D. and Master degrees in chemistry and microbiology, as well as years of laboratory experience. Our laboratories are ISO 17025 accredited and are recognized by several food and feed associations as approved laboratories.



# **ACCURATE & RELIABLE TESTING**

Pesticides are a vital part of the agriculture industry, assisting growers in meeting world food demands. However, due to negative impacts on human and animal health as well as ecological effects of pesticides and contaminants, it is not desirable to find residues of those chemicals pesticides in food or feed after it is harvested and headed for human or animal consumption.

Regulations have been set by many countries on the maximum residue levels (MRLs) allowed for pesticides in foods, food products and feeds. Typical residue limits range from 0.01-0.5 mg/kg. SGS utilizes specialized equipment including LC-MSMS (Liquid Chromatography with Tandem Mass Spectrometry) and GC-MS (Gas Chromatography with Mass Spectrometry) to screen for more than 300 pesticides. These instruments allow us to identify the pesticides present at levels 10 to 100 times lower than regulated limits.

# **GLOBAL MARKETS**

Our laboratory specializes in measuring pesticides in a variety of agricultural matrices including grains such as corn, canola, wheat and soybeans; feed ingredients including DDGS (Dried Distiller Grains with Solubles), corn gluten meal, soybean meal, and canola meal; and fresh produce. Our scientists can offer guidance on testing your products to ensure compliance with United States FDA pesticide tolerances, Codex Alimentarius MRLs, Japanese Positive List Pesticides, and other pesticide regulations.

# **PESTICIDE RESIDUE**

SGS's pesticide residue services include testing for insecticides, herbicides, and fungicides in the following classes:

- Acetamides
- Carbamates
- Dicarboximides
- Imidazolinones
- Nicotinoids
- Organochlorines
- Organonitrogens
- Organophosphates
- Phenoxy acid herbicides
- Phenylurea herbicides
- Pyrethroids
- Triazines
- Triazoles

### **CONTAMINANTS**

Melamine, mycotoxins, veterinary drug residues such as antibiotics, and hormones may be concentrated in products after processing. These contaminants may harm animals and humans in concentrated levels. Testing of specific contaminants need to be identified for analysis. These contaminants may be determined with use of the LC MSMS, GC MS, or PCR (Polymerase Chain Reaction) technologies.

SGS offers many more contaminant tests to suit your needs. Please contact us for more information regarding tests not listed here.

### **CONTACT DETAILS**

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