

Food Safety Controls for the Seafood Industry



Simple
Usable
Reliable
Rapid
Approved

The Seafood Industries intensive regulations and adherence to strict internal quality standards require monitoring solutions that produce rapid, accurate and reproducible results.

Neogen offers the industry a vast array of products and services that enhance the safety, quality and quantity of the global food supply, every step of the way to the consumer. They are a leader in developing and marketing test kits that provide food safety solutions. Neogen products are unsurpassed in terms of ease of use, convenience and speed and they are designed to make testing simple. The tests are specifically designed to minimise user time and maximise convenience.

Marine Biotoxins

Marine biotoxins are produced by harmful algal blooms that in addition to seafood contamination can result in human and wildlife mortality. Due to the high demand for shellfish across the world it is vital to test that produce is free from toxins as they cannot be destroyed by heat during cooking.

Neogen's new Reveal[®] 2.0 for ASP (Amnesic Shellfish Poisoning) detects ASP-causing toxins at a level of 20 parts per million (ppm), Reveal[®] 2.0 for DSP (Diarrhetic Shellfish Poisoning) detects DSP-causing toxins at 160 parts per billion (ppb), Reveal[®] 2.0 for PSP (Paralytic Shellfish Poisoning) detects PSP-causing toxins at 800 ppb STX equivalents or greater. All are compatible with the European Union Commission and U.S. Food and Drug Administration (FDA) permitted levels.



- Results within 15 minutes
- Easy to use single-step test
- Consistent interpretation of results using AccuScan Pro Reader

9560	Reveal 2.0 for ASP	Screens at 20 ppm	24 samples per kit
9561	Reveal 2.0 for DSP	Screens at 160 ppb	24 samples per kit
9562	Reveal 2.0 for PSP	Screens at 800 ppb	24 samples per kit
9563	Marine Biotoxins Starter Kit	Microwell holder, bag clip and roller	
9565	AccuScan [®] Pro Reader	Touch screen lateral flow reader	
9554	DSP Hydrolysis Pack		

Pathogens

Reveal[®] 2.0 for *E.coli* 0157:H7, *Listeria* and *Salmonella* combines a sandwich based ELISA with lateral flow technology to provide very easy to use, accurate and rapid test systems.

Simple

- Unitised devices are visually read and provide accurate and consistent results
- Convenient premixed and pre-measured media available
- Results are simple to interpret

Approved

- AOAC approved (*E.coli* 001103, *Listeria* 041101, *Salmonella* 960801)
- NF Validation (*Salmonella* NEO 35/01 – 10/11)
- Utilised by food companies worldwide

Rapid

- Results in 24 hours for *Salmonella*
- Results in 12 to 20 hours for *E. coli*
- Results in 27 hours for *Listeria*



9707	Reveal 2.0 for <i>Listeria</i>	Sensitivity: 1 cfu/analytical unit (food or environmental sample)	20 samples per kit
9706	Reveal 2.0 <i>Salmonella</i>	Sensitivity: 1 cfu/analytical unit (food or environmental sample)	20 samples per kit
9734	Reveal 2.0 <i>E.coli</i> 0157:H7	Sensitivity: 1 cfu/analytical unit (food or environmental sample)	20 samples per kit

Histamine

Histamine is produced in certain types of fish when microbes break down the amino acid histidine. Elevated temperatures and time abuse of harvested fish accelerate the growth of microorganisms normally present in fish, increasing the breakdown of histidine to histamine. Histamine production is common in species including tuna, mahi-mahi, marlin, bluefish, sardines, anchovy, bonito, herring and mackerel. Neogen has developed a range of testing solutions for the detection of histamine in 3 easy to use formats to suit different requirements.

Reveal® for Histamine

Reveal® for Histamine is a single-step lateral flow assay for the visual screening of histamine in fish samples. The test format is easy to use and requires minimal hands on time to result.

- Simple water extraction
- Rapid 5 minutes to results
- Room temperature storage



9501	Reveal for Histamine	Screens at 50 ppm	25 samples per kit
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Alert® for Histamine

Alert® for Histamine is a screening test that utilises a quick water extraction to extract histamine from a sample. Visual interpretation of the results can be made in less than 20 minutes. This test is designed to test one to six samples at one time.

- Simple water extraction
- 20 minutes to results
- Easy-to-use test format



9515	Alert for Histamine	Screens at 50 ppm	Up to 20 samples
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Veratox® for Histamine

Veratox® for Histamine allows the tester to obtain exact concentrations in parts per million of histamine, traditionally species of fish such as tuna, herring and mackerel. Neogen has received approval from the AOAC Research Institute (AOAC-RI 070703) for the Veratox for Histamine test for the detection of histamine.

- Simple water extraction
- Equivalent recovery to traditional fluorometric methods
- Rapid results, samples can be batched thus reducing the evaluation time by several hours



9505	Veratox for Histamine	Quantitative range of 2.5 to 40 ppm	Up to 38 samples
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Hygiene Monitoring

In the Aquaculture Industry, disease and infections can drastically affect the overall fish population. A good hygiene monitoring program can highlight problems before products ever reach the public. Stopping these issues early not only protects public health, but it also protects brand integrity.

AccuPoint® 2 ATP and AccuPoint 2 ATP with RFID Monitoring System

Neogen's AccuPoint 2 ATP Monitoring Systems are lightweight, hand-held systems that validates the effectiveness of a hygiene program by detecting ATP food residues and microorganisms present on surfaces and in liquids. AccuPoint 2 with RFID (radio frequency identification technology) can reduce overall testing time by allowing the AccuPoint reader to scan and automatically pull appropriate test site information.



9602	AccuPoint 2 ATP Monitoring System		
9602 RFID	AccuPoint 2 ATP Monitoring System with RFID		
9605	AccuPoint ATP Surface samplers		100 samplers
9606	AccuPoint ATP Water samplers		100 samplers
9607	AccuPoint ATP Access samplers		100 samplers

Drug Residues

Though drugs such as chloramphenicol and malachite green increase the shelf life of seafood, they carry serious carcinogenic health effects and have been banned from aquaculture in Europe, the U.S. and Canada.



- Fully quantitative results
- Faster time to results
- Competitive direct ELISA

9551	Veratox for Chloramphenicol	Quantitative range of 10 to 1000 ppt	90 samples per kit
8416	Veratox for Malachite Green	Quantitative range of 1 to 4 ppb	44 samples per kit

Sulfites

EU and FDA regulations state that seafood containing sulfite residues of 10 parts per million (ppm) or more must be labelled as containing sulfites. Alert® for Sulfites is a very simple rapid semi-quantitative test for detecting sulfites in shrimp. Sulfite residues in a sample will produce colour changes in a dye reagent provided in the kit.



- Rapid results in less than two minutes
- Three easy to follow steps
- Allows for on-site testing

9500	Alert for Sulfites	Semi-Quantitative range 10 to 100 ppm	200 tests per kit
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Why Choose Neogen?

Contract Services

For those without onsite testing facilities and to compliment products and kits, Neogen offers contract laboratory services for ASP, DSP, PSP and Norovirus.

- Flexible turnaround times to suit your needs
- Services are subject to extensive quality control and regular quality assurance
- Confidential results
- Dedicated customer service support to discuss results

Training and Technical Services

We will ensure you select the right testing solution for your needs and provide your team with comprehensive training and support on the usage of Neogen kits and equipment. Depending on the complexity of your requirements, number of employees to train or their current expertise we are able to create a training package customised to your needs. We have an on-site team of highly skilled technicians to help in providing you with the most efficient, world class technical support.

Validation

For unique commodities, we have an expert team dedicated to validating new matrices on our rapid methods compared to reference methods.



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