## VOLATILE ANALYSIS

## Contract Analytical Services - Case Study

## Case Study #8 Malodor in Fish Product

Internal Reference: Project Code Number L04232

Industry: Processed Food

Commodity: Fish-based Processed Food

**Problem/Goal:** Objectionable malodor in the large scale production of a fish-based processed food giving rise to consumer complaints.

**Analytical Approach:** SPME headspace collection of volatile odor compounds followed by analysis on the AromaTrax MDGC-O-MS system to identify and rank the importance of the offending odor compounds.

**Findings:** A single high intensity trace level malodor compound was detected in the packaged product. The unpackaged product and the packaging material by themselves did not have the odor. The determination of the chemical structure of the malodor led to the discovery of its precursors. One precursor was found to be a natural constituent of the food product. The other precursor came from one component of the package.

**Resolution:** The problem was quickly resolved by changing the package to one that did not have the precursor present.

**Comments:** The identification of the malodor and its precursors was accomplished in only a matter of days. This result was crucial for the client's continued operation

## Links for More Information

Aroma and malodor contract services: www.volatileanalysis.com Analytical instrumentation for aroma/malodor analysis: www.mdgc.com

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