**ABSTRACT**

Determination of Short and Medium Chained Chlorinated Paraffins in Salmon Samples using GC Orbitrap-MS

**INTRODUCTION**

In this study, the authors describe a method to determine short and medium chain chlorinated paraffins (CCPs) in salmon samples. The method involves sample preparation using accelerated solvent extraction (ASE), followed by cleanup on a Florisil column. The analytes were then analyzed using a GC Orbitrap-MS system, which provided high resolution and accurate mass measurements.

**MATERIALS AND METHODS**

**Sample Preparation**

**RESULTS**

The results showed that the method was able to detect and quantify CCPs in salmon samples with high accuracy and precision. The authors also discussed the challenges of analyzing CCPs, such as the high complexity of the compound mixtures found in both samples and standards. They concluded that the Q Exactive GC Orbitrap MS system is a powerful analytical tool for the analysis of CCPs in environmental samples.

**CONCLUSIONS**

The method described in this study is a good tool for the determination of CCPs in environmental samples, particularly in salmon samples. Further research is needed to optimize the method for other types of samples.

**REFERENCES**


4. diffuse scattering.

**TRADEMARKS/LICENSING**

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**Figure 2** shows an example of isotopically labeled SCCP and MCCP standards with the concentration range from 1-500ppb. Data acquired in Full-scan, NCI mode.

**Figure 3** shows the chromatograms of SCCP and MCCP standards in a salmon sample extract. The chromatograms were obtained using a Q Exactive GC Orbitrap GC-MS/MS system with a Thermo Scientific™ TRACE™ 1310 g as chromatograph.