

Title Analysis of Samples for Haloanisole Taints

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Sample Details

SWRI No.	Client Reference	Description
S19-1971	N/A	Blended Scotch Whisky Ref 40%
S19-1972	N/A	Blended Scotch Whisky- B 40% ABV
S19-1973	N/A	Blended Scotch Whisky- A 69% ABV

Analysis Methods Determination of congeners - OP283 using mass spectrometry

Comments Samples were analysed in duplicate using headspace solid phase micro-extraction with gas chromatography mass spectrometry. Full details of the method used are given in the Appendix.

To provide a rapid indication of 2,4,6-trichloroanisole concentrations, the amount present was estimated using the response to duplicate analyses of a 0.05µg/l standard solution using 2,4,5-trichlorotoluene as an internal standard.

The limit of detection of the analysis was 0.02µg/l at 20% ethanol. For concentrations at or close to this limit, samples were also analysed using gas chromatography - olfactometry. Although not definitive, the presence of a musty aroma at the correct retention time is a strong indication that 2,4,6-trichloroanisole is present.

Conclusions 2,4,6-trichloroanisole was detected in all samples, including the reference sample.

Signatories	Name	John Conner BSc PhD	Signature
For and on behalf of	Position	Senior Scientist	Date
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Table No. 1**Determination of congeners****Sample (SWRI No.)****S19-1971**

2,4,6-trichloroanisole was detected in this sample at an estimated concentration of 0.04µg/l at sample strength.

Analysis of the sample by gas chromatography - olfactometry detected a musty odour at the expected retention time of 2,4,6-trichloroanisole.

Sample (SWRI No.)**S19-1972**

2,4,6-trichloroanisole was detected in this sample at an estimated concentration of 0.07µg/l at sample strength.

Analysis of the sample by gas chromatography - olfactometry detected a musty odour at the expected retention time of 2,4,6-trichloroanisole.

Sample (SWRI No.)**S19-1973**

2,4,6-trichloroanisole was detected in this sample at an estimated concentration of 0.18µg/l at sample strength.