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**Method Summary****Determination of MBAS in Water****Scope and Range**

The MBAS method is useful for estimating the anionic surfactant content of waters but the presence of other methylene blue active substances will also be measured.

MBAS as dodecyl sulphate may be determined in water in the range 0.05 - 1.0 mg/l.

This range may be extended by dilution.

Working range: 0-1 ml/l

Detection limit: 0.05 mg/l

References

Standard Methods for the Examination of Water and Wastewater. 20th Edition. 1998

Principle

Preparation and Extraction:

The samples are unfiltered.

Analysis:

The method utilises spectrophotometry and thus all samples analysed must be clear and virtually colourless.

The colorimetric determination of MBAS in water uses methylene blue and chloroform and measures the colour produced at 652nm.

The MBAS anions bind to the cationic dye (methylene blue) through ion pair formation.

The methylene blue is then extracted in chloroform and the intensity of the blue colour transferring to the chloroform is a measure of the MBAS concentration.

Anionic surfactants are among the most prominent of many substances showing methylene blue activity.

Interferences

Negative interferences can result from the presence of cationic surfactants and these can bind to the MBAS anions instead of the methylene blue.