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## Determination of Linear Alkylbenzene Sulphonates and their Biodegradation Intermediates by Isocratic RP-HPLC

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**Abstract:** An HPLC method was developed to determine linear alkylbenzene sulphonates (LASs) and their biotransformation products sulphophenyl carboxylates by isocratic chromatography using two C<sub>18</sub> columns in series. Solid-phase extraction with a (C<sub>18</sub>) cartridge was employed to isolate LAS from sediment and sewage effluent samples. Sodium perchlorate and ammonium perchlorate were used as ion pair agents. The recovery of the compounds was 94%  $\mu\text{m}^2$  and 98%  $\mu\text{m}^2$  respectively for sediment and sewage effluent. It was demonstrated that it is possible to separate LAS compounds and their isomers and homologues using this system.

**Key Words:** Linear alkylbenzene sulphonates, solid phase extraction, sewage effluent, water, sediment, separation, HPLC, ion pair agent.

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