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Title:	Enantioseparation of racemic amino alcohols using green micellar liquid chromatography and confirmation of absolute configuration with elution order
Authors:	Alwera, V. (/jspui/browse?type=author&value=Alwera%2C+V.) Sehlangia, S. (/jspui/browse?type=author&value=Sehlangia%2C+S.) Alwera, S. (/jspui/browse?type=author&value=Alwera%2C+S.)
Keywords:	Amino alcohol Enantioseparation Derivatization RP-HPLC Micellar liquid chromatography Green mobile phase
Issue Date:	2020
Publisher:	Bellwether Publishing, Ltd.
Citation:	Separation Science and Technology (Philadelphia)
Abstract:	Micellar liquid chromatographic method was developed for the enantioseparation of racemic amino alcohols. For that, diastereomeric derivatives of amino alcohols were prepared with activated ester of (S)-ketoprofen and separated on C18 column of RP-HPLC using the aqueous solution of surfactant (Brij-35 and SDS) as an alternative of the organic solvents. Also, chromatographic conditions were optimized by varying concentration of surfactant in aqueous solution, and by varying concentration and pH of the buffer. In addition, density functional theoretical calculations (DFT), validation [LOD (0.245 ng mL <sup>-1</sup> ) and LOQ (0.735 ng mL <sup>-1</sup> )] and green-assessment score (82 score) were calculated for the developed method.
URI:	<a href="https://www.tandfonline.com/doi/full/10.1080/01496395.2020.1819826">https://www.tandfonline.com/doi/full/10.1080/01496395.2020.1819826</a> ( <a href="https://www.tandfonline.com/doi/full/10.1080/01496395.2020.1819826">https://www.tandfonline.com/doi/full/10.1080/01496395.2020.1819826</a> ) <a href="http://hdl.handle.net/123456789/3454">http://hdl.handle.net/123456789/3454</a> ( <a href="http://hdl.handle.net/123456789/3454">http://hdl.handle.net/123456789/3454</a> )
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