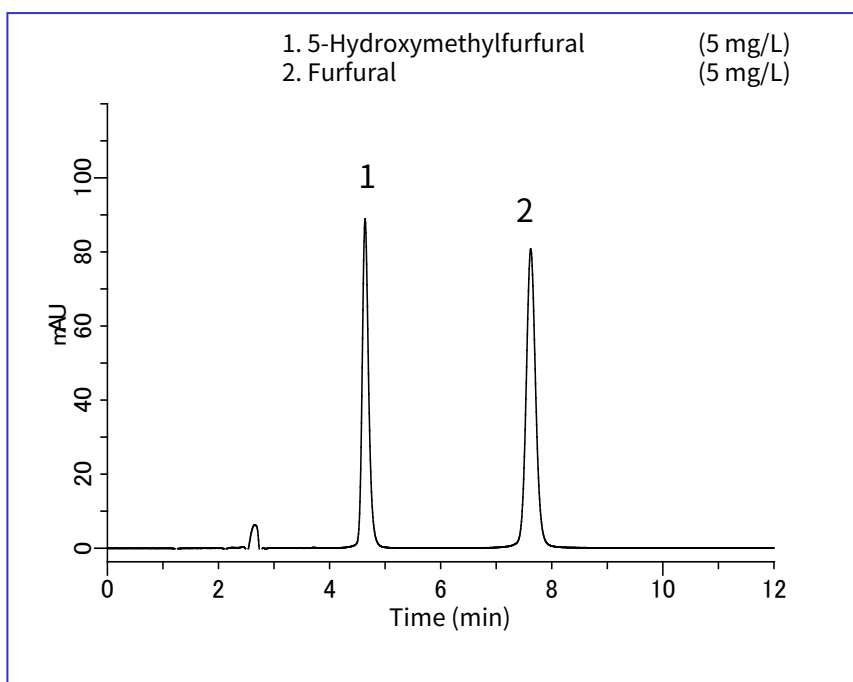


This application describes the analysis of furfurals using a High Performance Liquid Chromatography (HPLC) system.

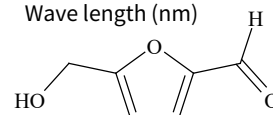
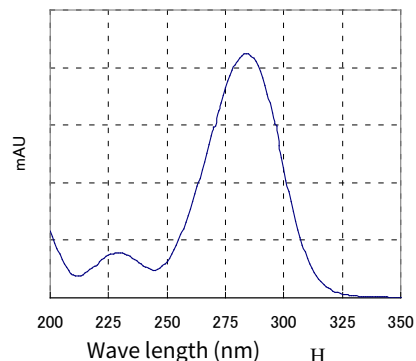
Furfural, is a breakdown product of sugars, and is also produced as a decomposition product of the cellulosic insulating paper used in transformers. A related compound, 5-hydroxymethylfurfural (HMF), is also known as a breakdown product of sugars, and its formation is believed to develop over time or be accelerated when heated. HMF is considered to be a compound that determines the quality of foods high in sugar, such as honey. This report describes the analysis of furfural in soft drinks.

(K.Suzuki)

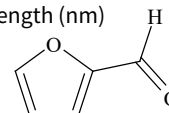
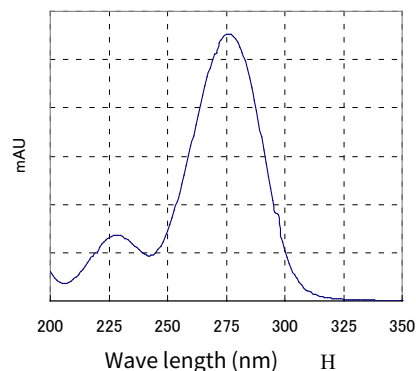
Example: Measurement of standard



Structural formulae and UV spectra



5-Hydroxymethylfurfural

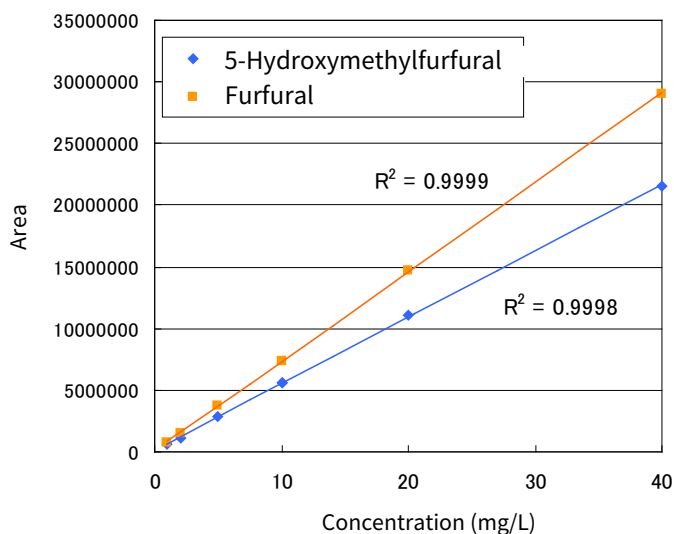


Furfural

Structures are created using Chemistry 4-D Draw which is provided By ChemInnovation Software, Inc.

HPLC conditions

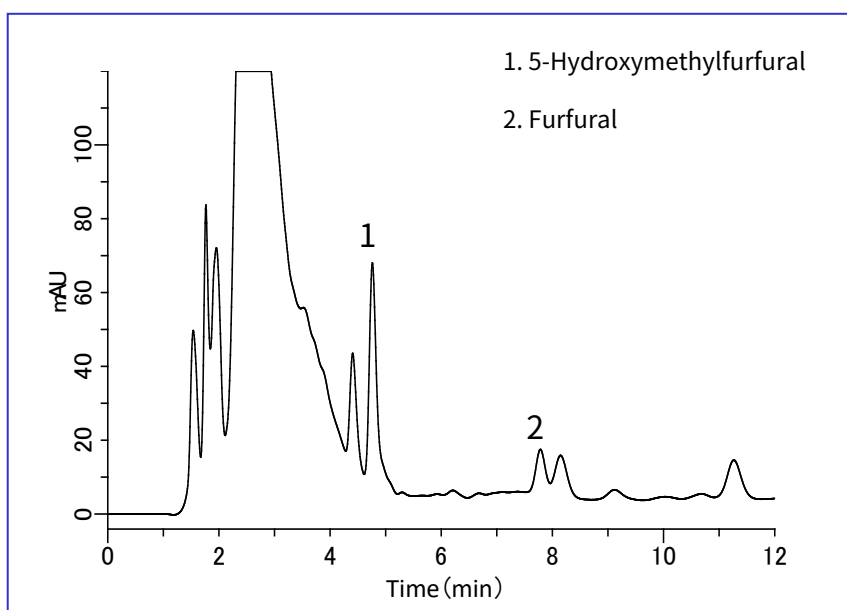
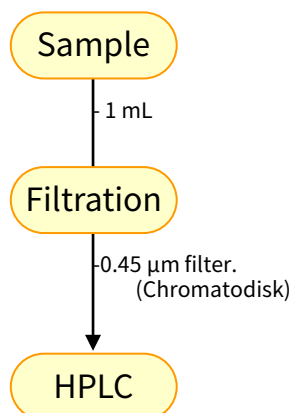
Column	: Inertsil ODS-3 (5 μ m, 150 x 3.0 mm I.D.)
Eluent	: A) CH ₃ CN B) H ₂ O A/B = 10/90, v/v (Mixed by a gradient mixer)
Flow rate	: 0.4 mL/min
Column temperature	: 40 °C
Detected	: PDA 275 nm
Injection volume	: 20 μ L



Calibration curve

Examples: Analysis of peach juice

Example of
pretreatment



HPLC column: Inertsil ODS-3 5 μm, 150 x 3.0 mm I.D.
Cat.No. 5020-01751

GL Sciences disclaims any and all responsibility for any injury or damage which may be caused by this data directly or indirectly. We reserve the right to amend this information or data at any time and without any prior announcement.

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