

CoreFocus
Report
No.170A

LC

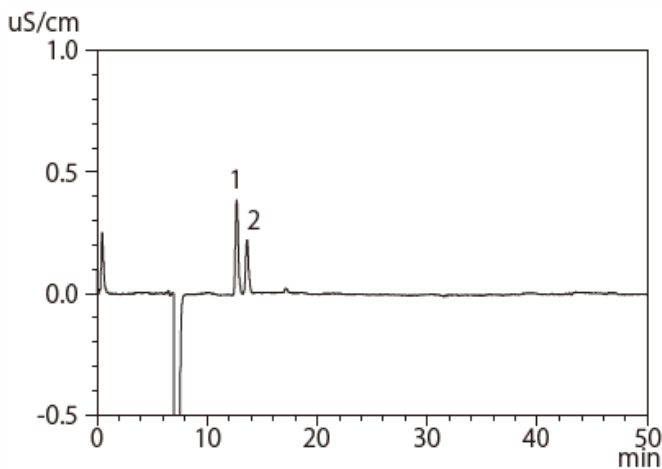
Ion-exclusion

Shim-pack Series

Shim-pack™ SCR-102H

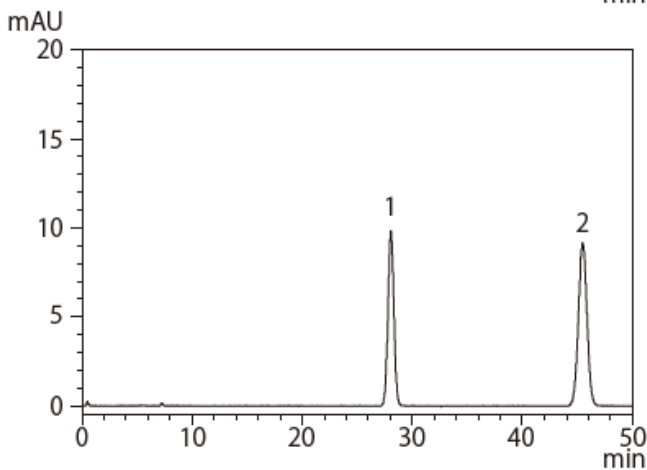
Analysis of Biomass Using Organic Acid Analysis System

Keywords: fuels, bioethanol, fermentation



Upper
1. Formic acid
2. Acetic acid
(10 mg/L each)

Lower
1. 5-Hydroxymethylfurfural
2. Furfural
(10 mg/L each)



System	: Organic Acid Analysis System
Column	: Shim-pack SCR-102H (300 mm x 8.0 mm I.D.), P/N : 228-17893-91
Guard column	: Guard column SCR-102H (50 mm x 6.0 mm I.D.), P/N : 228-17924-91
Mobile phase	: 5 mmol/L Perchloric acid aq. solution
Flow rate of mobile phase	: 0.8 mL/min
pH buffering solution	: 5 mmol/L Perchloric acid containing 20 mmol/L Bis-Tris and 0.1 mmol/L EDTA
Flow rate of pH buffering solution	: 0.8 mL/min
Column temp.	: 35 °C
Detection 1	: Electrical conductivity detector (CDD-10Avp) (Formic acid, acetic acid)
Detection 2	: UV-VIS detector (SPD-20AV) at 275 nm (5-hydroxymethylfurfural, furfural)
Injection vol.	: 10 µL

Source : Application News L485 ([JP](#), [ENG](#))

CoreFocus and Shim-pack are trademarks of Shimadzu Corporation or its affiliated companies in Japan and/or other countries.

Shimadzu Corporation
www.shimadzu.com/an/

For Research Use Only. Not for use in diagnostic procedures.

This publication may contain references to products that are not available in your country. Please contact us to check the availability of these products in your country.

The content of this publication shall not be reproduced, altered or sold for any commercial purpose without the written approval of Shimadzu.

Company names, products/service names and logos used in this publication are trademarks and trade names of Shimadzu Corporation, its subsidiaries or its affiliates, whether or not they are used with trademark symbol "TM" or "®".

Third-party trademarks and trade names may be used in this publication to refer to either the entities or their products/services, whether or not they are used with trademark symbol "TM" or "®".

Shimadzu disclaims any proprietary interest in trademarks and trade names other than its own.

The information contained herein is provided to you "as is" without warranty of any kind including without limitation warranties as to its accuracy or completeness. Shimadzu does not assume any responsibility or liability for any damage, whether direct or indirect, relating to the use of this publication. This publication is based upon the information available to Shimadzu on or before the date of publication, and subject to change without notice.