Waters™

Applikationsbericht

Analysis of Food Sugars/Saccharides in Beer Using ACQUITY UPLC BEH Amide Columns

Waters Corporation

This is an Application Brief and does not contain a detailed Experimental section.

Abstract

This application brief highlights the analysis of food sugars/saccharides in beer using ACQUITY UPLC BEH Amide Columns.

Introduction

Structures

Experimental

Chromatographic Conditions

Column: ACQUITY UPLC BEH Amide 2.1

x 100 mm, 1.7 μm

Part Number: 186004801

Mobile Phase A: 80/20 MeCN/H₂O with 0.2%

triethylamine [TEA]

Mobile Phase B: 30/70 MeCN/H₂O with 0.2%

triethylamine [TEA]

Flow Rate: 0.13 mL/min

Gradient: 10 minute gradient, 80%-50%

MeCN (w/0.2% TEA) with 25

minute re-equilibration

Injection Volume: 1.3 μ L (PLNO)

Sample Concentration: Standards at 1mg/mL, beer at

100% (No dilution)

Sample Diluent: 50/50 MeCN/H₂O

Column Temperature: 35 °C

Strong Needle Wash: 20/80 MeCN/ H_2O (800 μL)

Weak Needle Wash: $75/25 \text{ MeCN/H}_2\text{O} (500 \text{ }\mu\text{L})$

Seal Wash: 50/50 MeCN/H₂O

Instrument: Waters ACQUITY UPLC with

ELSD

Gradient

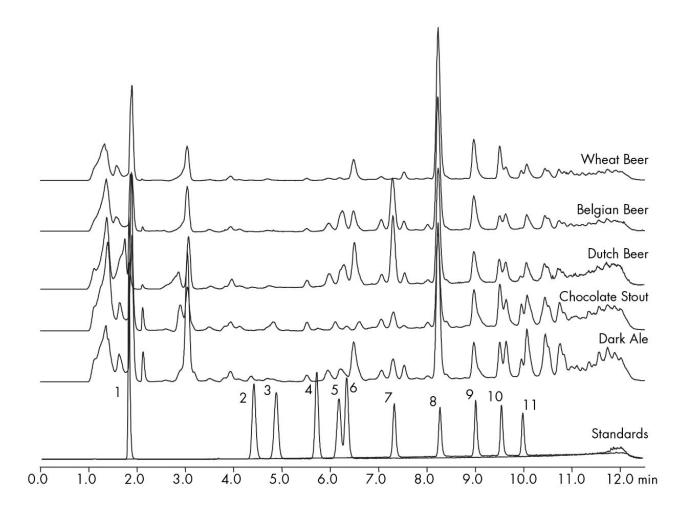
Time	Profile			
(min)	%A	%B		
0.00	90.00	10.00		
10.00	30.00	70.00		
10.01	90.00	10.00		
35.00	90.00	10.00		

ELSD Conditions

Gain: 200

Pressure: 40 psi

Drift Tube Temperature:	40 °C					
Nebulizer:	Cooling					
Data Rate:	10 pps					
Filter Time Constant:	Normal					
Results and Discussion						
The compounds analysed in this study are:						
1. p-Toluamide						
2. Fructose						
3. Glucose						
4. Sucrose						
5. Maltose						
6. Lactose						
7. Maltotriose						
8. Maltotetraose						
9. Maltopentaose						
10. Maltohexahose						
11. Maltoheptaose						



Featured Products

ACQUITY UPLC ELS Detector https://www.waters.com/514219

WA60125, October 2009

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