## Waters™



# 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/H<sub>2</sub>O with 0.2%

triethylamine [TEA]

Mobile Phase B: 30/70 MeCN/H<sub>2</sub>O 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 µL (PLNO)

Sample Concentration: Standards at 1mg/mL, beer

at 100% (No dilution)

Sample Diluent: 50/50 MeCN/H<sub>2</sub>O

Column Temperature: 35 °C

Strong Needle Wash:  $20/80 \text{ MeCN/H}_2\text{O} (800 \mu\text{L})$ 

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

Seal Wash: 50/50 MeCN/H<sub>2</sub>O

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				

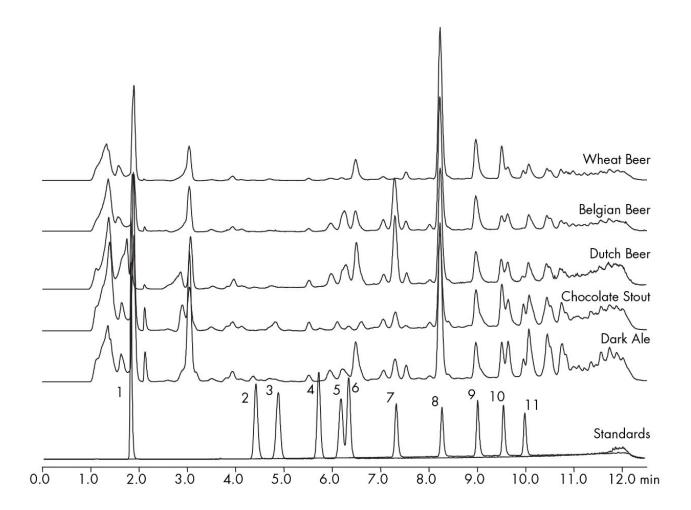
11. Maltoheptaose

7. Maltotriose

8. Maltotetraose

9. Maltopentaose

10. Maltohexahose



## **Featured Products**

ACQUITY UPLC ELS Detector <a href="https://www.waters.com/514219">https://www.waters.com/514219</a>

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