## Waters<sup>™</sup>

應用手冊

# Analysis of Food Sugars in Bran with Raisins Cereal Using ACQUITY UPLC BEH Amide Columns

Waters Corporation

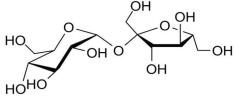
This is an Application Brief and does not contain a detailed Experimental section.

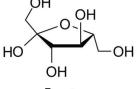
#### Abstract

This application brief highlights the analysis of food sugars in bran with raisins cereal using ACQUITY UPLC BEH Amide Columns.

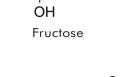
Introduction

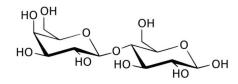
#### Structures



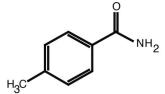


Sucrose

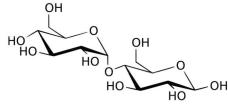




Lactose



p-Toluamide (unretained compound)



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Maltose



## Experimental

#### **Chromatographic Conditions**

Column:ACQUITY UPLC BEH Amide 2.1 x 150 mm, 1.7 µmPart Number:186003462Mobile Phase A:80/20 MeCN/H2O with 0.2% triethylamine [TEA]

Mobile Phase B:	30/70 MeCN/H <sub>2</sub> O with 0.2% triethylamine [TEA]
Flow Rate:	0.29 mL/min
Flow Profile:	90% A/10% B (75% MeCN with 0.2% TEA)
Injection Volume:	2.0 μL (PLNO)
Sample Concentration:	Standards at 1 mg/mL each, cereal extracted at 8 mg/mL
Sample Diluent:	50/50 MeCN/H <sub>2</sub> O
Column Temperature:	35 °C
Strong Needle Wash:	20/80 MeCN/H <sub>2</sub> O (800 μL)
Weak Needle Wash:	75/25 MeCN/H <sub>2</sub> O (500 μL)
Seal Wash:	50/50 MeCN/H <sub>2</sub> O
Instrument:	Waters ACQUITY UPLC with ELSD

### **ELSD** Conditions

Gain:	200
Pressure:	40 psi
Drift Tube Temperature:	40 °C
Nebulizer:	Cooling

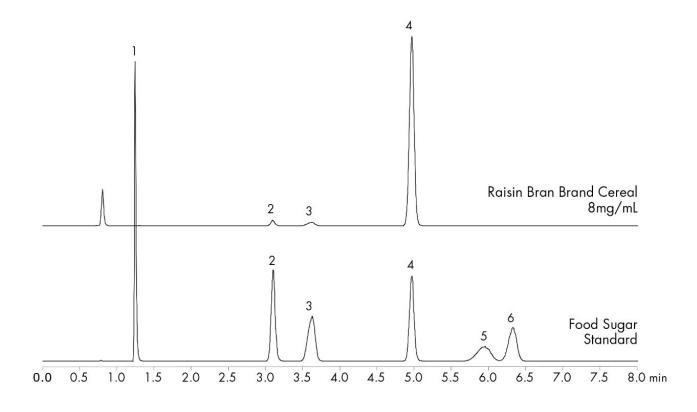
Data Rate:	10 pps

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



#### Featured Products

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

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