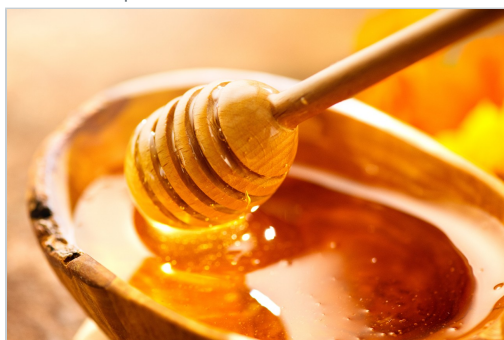


Application Note

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

Waters Corporation



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

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## Abstract

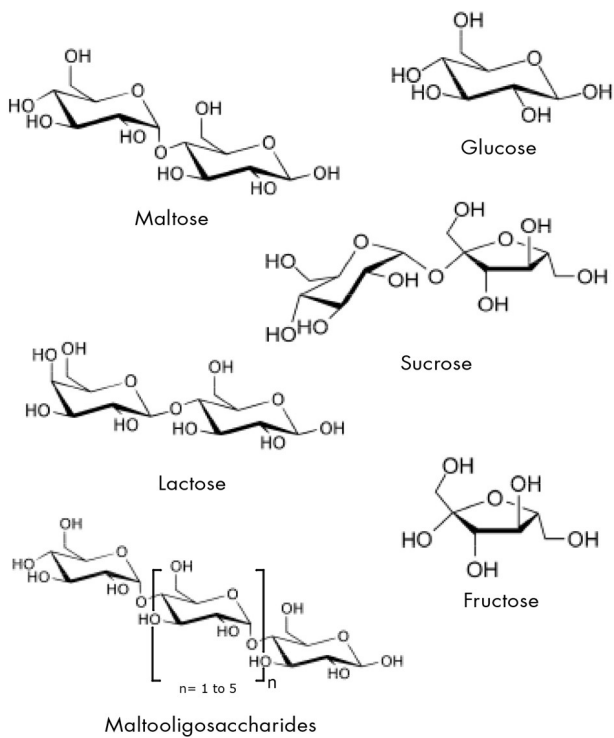
This application brief demonstrates analysis of food Sugars/Saccharides in honey.

# Introduction

Compounds analysed in this application brief :

1. Fructose
2. Glucose
3. Sucrose
4. Maltose
5. Maltotriose
6. Maltotetraose
7. Maltopentaose

## Structures



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# Experimental

## Chromatographic Conditions

Column:	ACQUITY UPLC BEH Amide 2.1 x 50 mm, 1.7 $\mu$ m
Part Number:	186004800
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:	0.15 mL/min
Injection Volume:	0.7 $\mu$ L (PLNO)
Sample Concentration:	Honey and corn syrup at 5-10 mg/mL each
Sample Diluent:	50/50 MeCN/H <sub>2</sub> O
Column Temperature:	45 °C
Strong Needle Wash:	20/80 MeCN/H <sub>2</sub> O (800 $\mu$ L)
Weak Needle Wash:	75/25 MeCN/H <sub>2</sub> O (500 $\mu$ L)
Seal Wash:	50/50 MeCN/H <sub>2</sub> O
Instrument:	Waters ACQUITY UPLC with ELSD
Gradient:	5 minute gradient, 80%-50% MeCN (w/0.2% TEA) with 10 minute re-equilibration

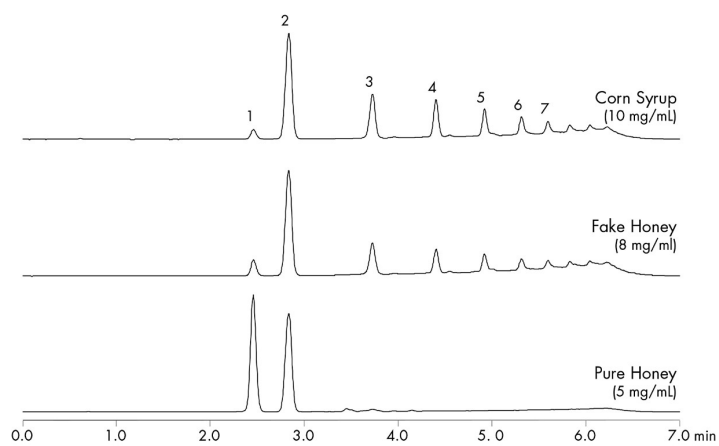
Time (min)	Profile	
	A%	B%
0.00	100.00	0.00
5.00	40.00	60.00
5.01	100.00	0.00
15.00	100.00	0.00

### ELSD Conditions

Gain:	200
Pressure:	40 psi
Drift Tube Temperature:	40 °C
Nebulizer:	Cooling
Data Rate:	10 pps
Filter Time Constant:	Normal

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## Results and Discussion



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1. Fructose, 2. Glucose, 3. Sucrose, 4. Maltose, 5. Maltotriose, 6. Maltotetraose, 7. Maltopentaose

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## Featured Products

[ACQUITY UPLC System](#)

[2424 Evaporative Light Scattering \(ELS\) Detector](#)

WA60124, October 2009

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