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Nestlé Quality Assurance Center  
Dublin

# Technical Datasheet

**Analysis Name:** Oligosaccharides Determination by High Resolution Capillary Gas Chromatography

**Method Number:** NQA-06.5550

**Scope of Application:** Juices, Juice Concentrates, and Juice Purees

**Description:** This is a semi-quantitative method applicable to the detection of oligosaccharides from high fructose inulin syrup (HFSi), high fructose corn syrup (HFCS), and medium invert sugar syrup in juices. The sample is diluted with reagent alcohol and brought to dryness under nitrogen in a dry bath at 60° C. After trimethylsilyl derivatization, the samples are analyzed using high resolution capillary gas chromatography with flame ionization detection. The fingerprint patterns obtained from known authentic standards are compared with those from samples to confirm the presence of adulterants.

**Sample Weight Required:** 50 g

**Method Reference:** Low, N. H., Determination of Fruit Juice Authenticity by Capillary Gas Chromatography with Flame Ionization Detection (1996), JOAC International, 79(3), 724.

**Analytical Platform:** High Resolution Capillary Gas Chromatograph

**Special Information:** Not applicable for Sweet Potato Juice/Puree Samples

Analyte Reported	Alias	Unit of Measure	Limit of Quantification	Reproducibility
High Fructose Corn Syrup from Inulin	Fructuline	%	1	40%
Maltose		ppm	100	40%
Isomaltose		ppm	100	40%



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Invert Sugar	IS	%	5	40%
IS2/IS1 ratio		N/A	N/A	N/A
Cellobiose		ppm	100	40%