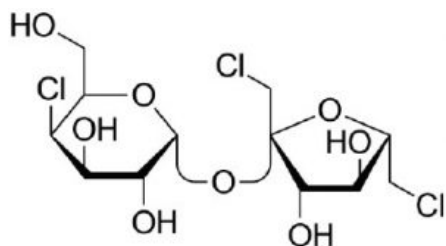
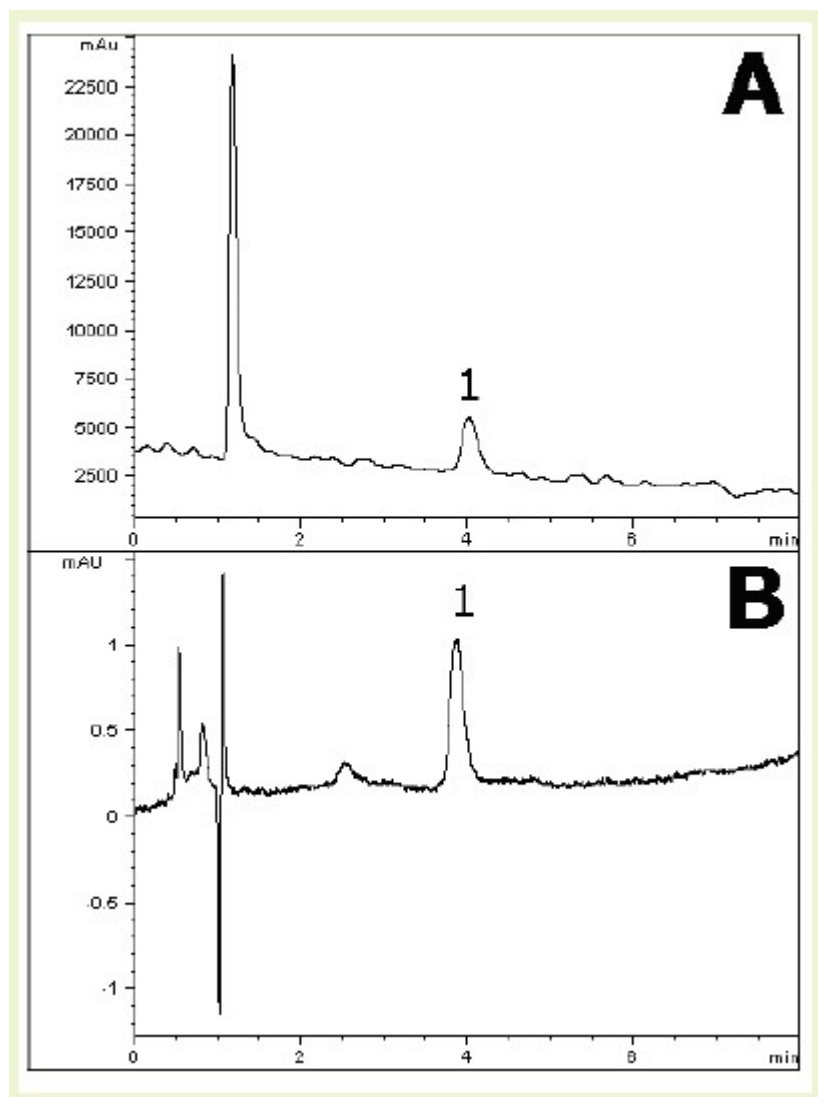


Sucralose – AppNote

Common Artificial Sweetener

Sucralose does not exhibit significant UV absorption, hence detection of this analyte may be suited to Refractive Index (RI) as an alternative. Both approaches are shown in this application note, where UV and RI detector modules were attached in series. The relatively high concentration used in this example allowed for adequate detection in either case. These conditions were adapted from the USP assay method. A slight modification in the Water content was made to obtain higher retention.



Peak:

Sucralose

Method Conditions

Column: Cogent Bidentate C18™, 4µm, 1 00Å

Catalog No.: 40018-75P

Dimensions: 4.6 x 50 mm

Mobile Phase: 90% DI Water / 10% Acetonitrile (v/v)

Injection vol.: 2µL

Flow rate: 1.0 mL/minute

Detection:

Fig. A: Refractive Index

Fig. B: UV 200 nm

Sample: 5.0 mg/mL Sucralose reference standard in diluent of 85% DI Water / 15% Acetonitrile.

t₀: 1.0 minute

Note: The discovery of Sucralose is quite serendipitous. Researcher Shashikant Phadnis was asked by his adviser Leslie Hough to “test” a particular chlorinated sugar compound they had been studying. However, Phadnis misheard him and thought he was being asked to “taste” it instead! Upon doing so, he found it to be much sweeter than ordinary table sugar.



Attachment

No 361 Sucralose.pdf 0.2 Mb [Download File](#)

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