

Analysis of Saccharin Sodium

Introduction

The used amount of sweetener to be added for the purpose of giving a sweetness to food is controlled by the Food Hygiene Law. This time, regarding the saccharin sodium which is one of the sweeteners, the result of analysis based on the Food Additive Test Method that is posted to the annotation of the Food Hygiene Law is reported as below.

Keyword: Food additive, Sweetener, Saccharin sodium, C18 column, UV detection

Experimental

[Equipment]	[Conditions]
Pump: PU-2080	Column: CrestPak C18S (4.6 mmI.D. x 150 mmL, 5 μ m)
Degasser: DG-2080-53	Eluent: 0.05 mol/L Phosphate buffer (pH 6.9)/Methanol (90/10)
Column oven: CO-2060	Flow rate: 1.0 mL/min
Autosampler: AS-2057	Column temp: 40°C
Detector: UV-2075	Wavelength: 230 nm
	Injection volume: 10 μ L
	Standard sample: Saccharin sodium 0.5 μ g/mL in water

Structural formula of saccharin sodium is shown in Fig. 1.

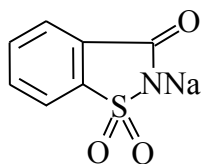


Fig. 1. Structural Formula of Saccharin Sodium

Results

The chromatogram of standard sample of saccharin sodium is shown in Fig. 2.

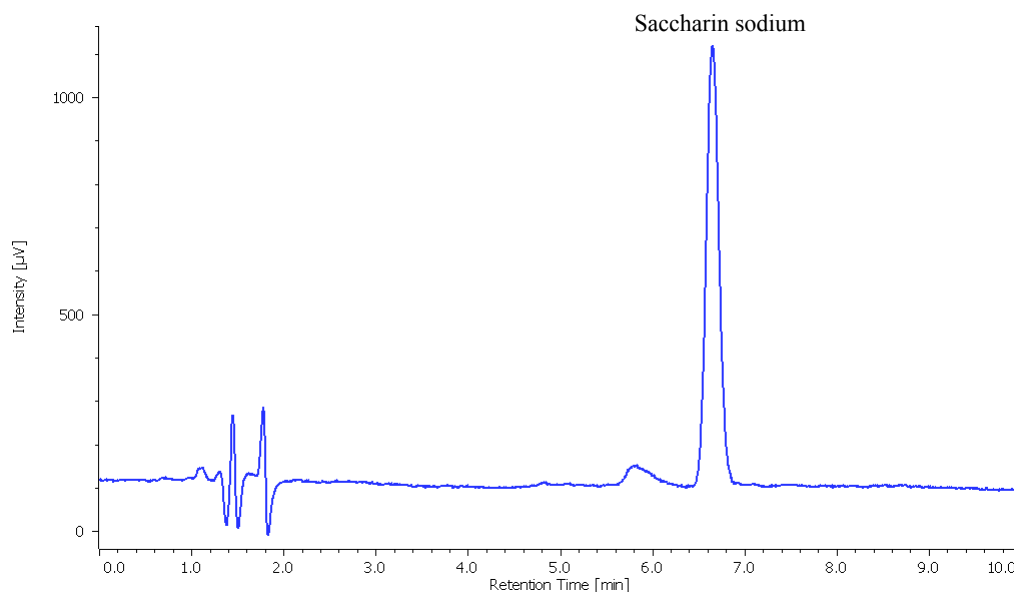


Fig. 2. The Chromatogram of Standard Sample of Saccharin Sodium