

ABSTRAK

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Program Studi : Farmasi
Judul : Analisis Kadar Sakarin Secara KCKT dan Siklamat Secara Spektrofotometer UV-Vis Pada Suplemen Anak

Pemanis (sweetener) adalah bahan tambahan pangan berupa pemanis alami dan pemanis buatan yang memberikan rasa manis pada produk pangan. Penelitian ini bertujuan untuk mengetahui apakah suplemen anak yang beredar mengandung pemanis buatan berupa sakarin dan siklamat dan penggunaan pemanis tersebut sudah memenuhi persyaratan yang telah ditetapkan oleh BPOM NO.32 Tahun 2019 tentang persyaratan keamanan dan mutu obat tradisional. Pengambilan tiga sampel suplemen anak dilakukan secara acak pada beberapa toko obat. Metode penelitian yang digunakan untuk penetapan kadar Sakarin menggunakan KCKT dan penetapan kadar siklamat menggunakan Spektrofotometer UV-VIS. Hasil penelitian kadar sakarin dalam suplemen anak yaitu didapat kadar sampel (1084) 463,02 mg/kg, sampel (1085) dengan kadar 363,01mg/kg, dan sampel (1114) dengan kadar 652,61mg/kg. Sedangkan untuk kadar siklamat dalam suplemen anak didapat kadar sampel (1084) 763,34 mg/kg, sampel (1085) 1279,87 mg/kg dan sampel (1114) 436,07 mg/kg. Kesimpulan kadar sakarin yaitu sampel (1084), sampel (1085), dan sampel (1114) memenuhi persyaratan Natrium sakarin maksimum 1200 mg/kg produk. Sedangkan kesimpulan untuk kadar siklamat yaitu sampel (1084), sampel (1114) memenuhi persyaratan Natrium siklamat yaitu maksimum 1250 mg/kg produk, dan sampel (1085) dapat disimpulkan tidak memenuhi persyaratan.

Kata Kunci :

Pemanis, Suplemen, Sakarin, Siklamat, Kromatografi Cair Kinerja Tinggi (KCKT), Spektrofotometer UV-VI

ABSTRACT

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Study Program : Pharmacy
Subject : Analysis of Saccharin Levels by HPLC and Cyclamate by UV-Vis Spectrophotometer in Children's Supplements

Sweeteners are food additives in the form of natural sweeteners and artificial sweeteners that give a sweet taste to food products. This study aims to determine whether the circulating children's supplements contain artificial sweeteners in the form of saccharin and cyclamate and the use of these sweeteners has met the requirements set by BPOM NO.32 of 2019 concerning the safety and quality requirements of traditional medicines. Three samples of children's supplements were taken randomly at several drug stores. The research method used to determine the levels of saccharin using HPLC and determination of levels of cyclamate using UV-VIS Spectrophotometer. The results of the study on the determination of saccharin levels in children's supplements were obtained for samples (1084) 463.02 mg/kg, samples (1085) with levels of 363.01 mg/kg, and samples (1114) with levels of 652.61 mg/kg. Meanwhile, for the determination of cyclamate levels in children's supplements, the sample (1084) was 763.34 mg/kg, the sample (1085) was 1279.87 mg/kg and the sample (1114) was 436.07 mg/kg. The results of the determination of saccharin levels found that samples (1084), samples (1085), and samples (1114) could be concluded to meet the requirements for Sodium saccharin (Sodium saccharin) maximum of 1200 mg/kg product. Then for the determination of the levels of cyclamate found two samples (1084) and the sample (1114) can be concluded to meet the requirements of Sodium Cyclamate (Sodium Cyclamate) which is a maximum of 1250 mg/kg product, while one sample (1085) found levels exceeding the maximum limit so it can be concluded that it does not meet condition.

Keywords :

Sweeteners, Supplements, Saccharin, Cyclamate, High Performance Liquid Chromatography (HPLC), UV-VIS Spectrophotometer