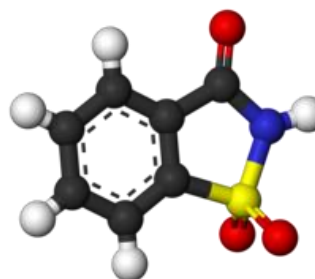
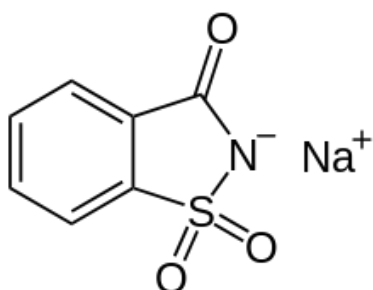


SACCHARIN AND ITS AREAS OF USE

Toychieva Diyorakhon Isomiddin kizi

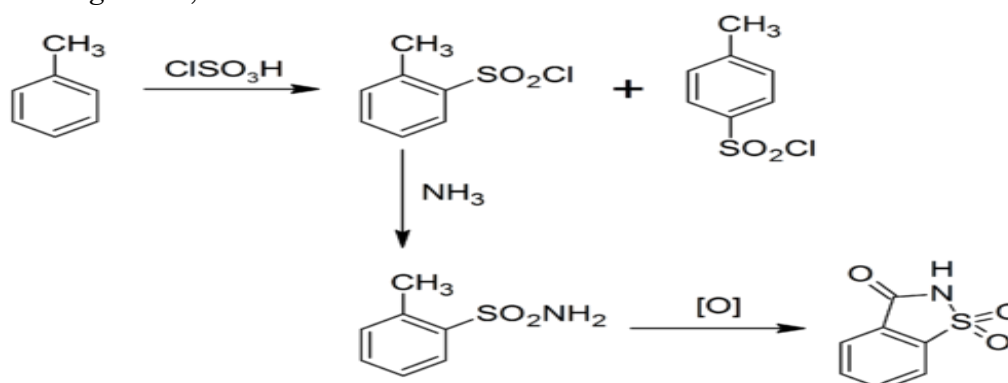
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Chemistry Education Department 3-stage 302-Group Student**ABSTRACT**

Saccharin is a colorless crystalline substance with a sweet taste, the molecular mass of which is 183,13, the liquid temperature is 229-229,7 oC. Poorly soluble in water and alcohol, chloroform and diethyl ether, well soluble in solutions of carbonates of alkaline metals. On sale is a crystallogidрати of sodium salt "saccharin", sweet in 300-500 times more than sugar. Saccharin is not digested in the body and is excreted with urine.

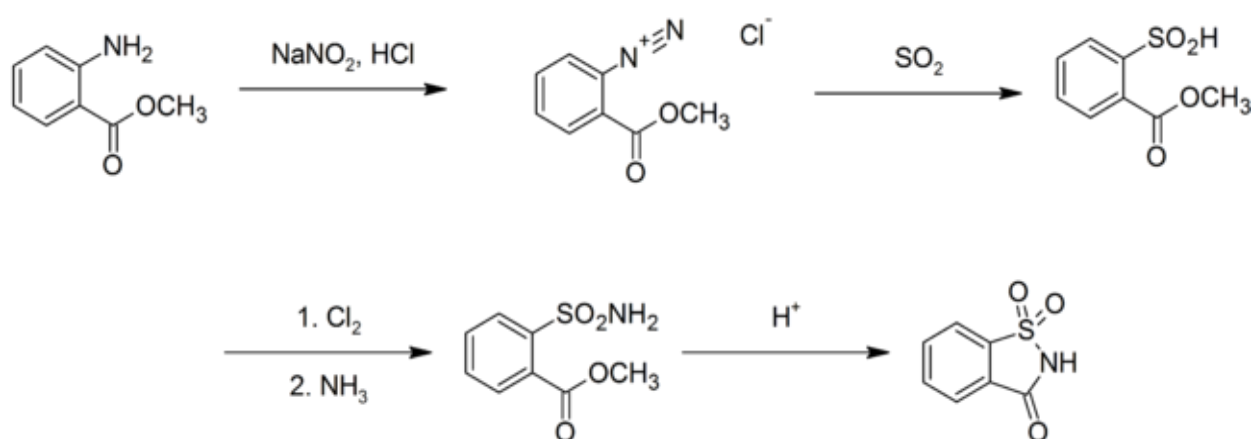


Saccharin was born in 1879 year at the University of John Hopkins (USA) K.By Falberg professor A. In the laboratory of Remsen, 2-toluolsulfonamide was synthesized by chance during the study of the oxidation process. In 1884 year K. Falberg filed a patent for the method of obtaining saccharin and established production on an industrial scale.

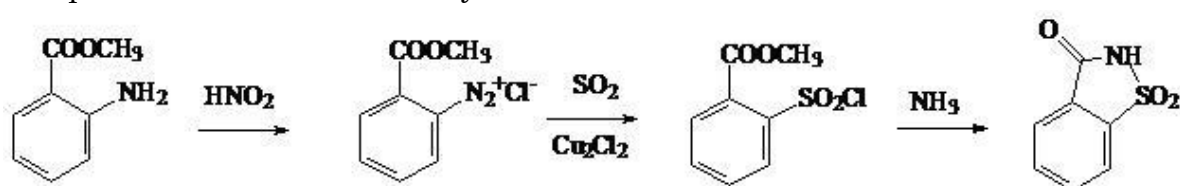
Saccharin can be obtained in different ways. Initially Remsen and Falberg used saccharin ni toluol ni sulfolab organ with chlorsulfonic acid. Formed chloranganate is then oxidized with potassium permanganate, converted into an amide.



This method has become ineffective. Only in 1950 year, the method of industrial production of saccharin was developed by the Maumee Chemical Company (Ohio, USA). This method is based on the reaction of citric acid with nitric acid, sulfur (IV) oxide, chlorine and ammonia.



It is also possible to take from methyl ether of saccharin 2-aminobenzoic acid



Another method developed in 1967 year is based on the reaction of benzyl chloride.

Saccharin forms salts with alkalis. As a result of the reaction with alkylating reagents (alkylhalogenides, powders, trialkylphosphites), n-alkyl products are released, C-alkyl products under more mild conditions. When reacting with vinylacetate, an N-vinyl compound is formed, when reacting with ethylenchlorhydrine or ethylenkarbonate, N-hydroxyethylation is observed, and N-galogen compound is formed with halogen compounds. Saccharin is attached to faollashgan Aries. It forms a digidrate called sodium tuzi crystallose of saccharin, easily soluble in water.

Saccharin as a food additive

Saccharin is given to patients with diabetes mellitus as a sugar substitute. Saccharin does not have useful properties, with its help it is impossible to lose weight, because saccharin reduces the breakdown of excess substance, opens the appetite. These conclusions are based on the results of experiments on rats. Saccharin was considered to have a chancellor's influence. In 1981-2000 years on the labels of products with the addition of saccharin was written information about its harmful effects. However, it was later discovered that the experiments on rats were not correct. It is proved that 1 mg of saccharin per day for 5 kg of weight per person is absolutely harmless.

Saccharin is used in industry as a sweetener and aromatizer. also on the basis of saccharin, sugar substitutes are produced. It is used in the manufacture of cool drinks and in combination with other sweeteners, since when using sucrose itself, a metallic taste can come from the product. Currently, the use of sucrose in the food industry is limited.

Another area of use of saccharin is the pharmaceutical industry. In pharmacology, ayri is used in the production of antibacterial drugs. saccharin is also added to the composition of toners for color printers and copy multiplexers (kseroks).

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