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## 21 Author

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## 22 Date of Revision

4 May 2017.

# Saccharin Sodium

## 1 Nonproprietary Names

BP: Saccharin Sodium

JP: Saccharin Sodium Hydrate

PhEur: Saccharin Sodium

USP-NF: Saccharin Sodium

## 2 Synonyms

1,2-Benzisothiazolin-3-one 1,1-dioxide, sodium salt; 2-sulfobenzoic acid imidesodium salt; 2,3-dihydro-3-oxobenzisulfonazolesodium salt; *Crystallose*; E954; gendorf 450; *o*-benzoylsulfimide sodium salt; *o*-sulfobenzimidatesodium; saccharin sodium salt; saccharinsodium salhydrate; saccharinum natricum; sodium saccharide; sodium saccharinate; sodium saccharine; sodium *o*-benzosulfimide; soluble gluside; soluble saccharin; sucra; sucaryl sodium; *Syncal*.

## 3 Chemical Name and CAS Registry Number

1,2-Benzisothiazol-3(2H)-one 1,1-dioxide, sodium salt

[128-44-9] for the anhydrous material

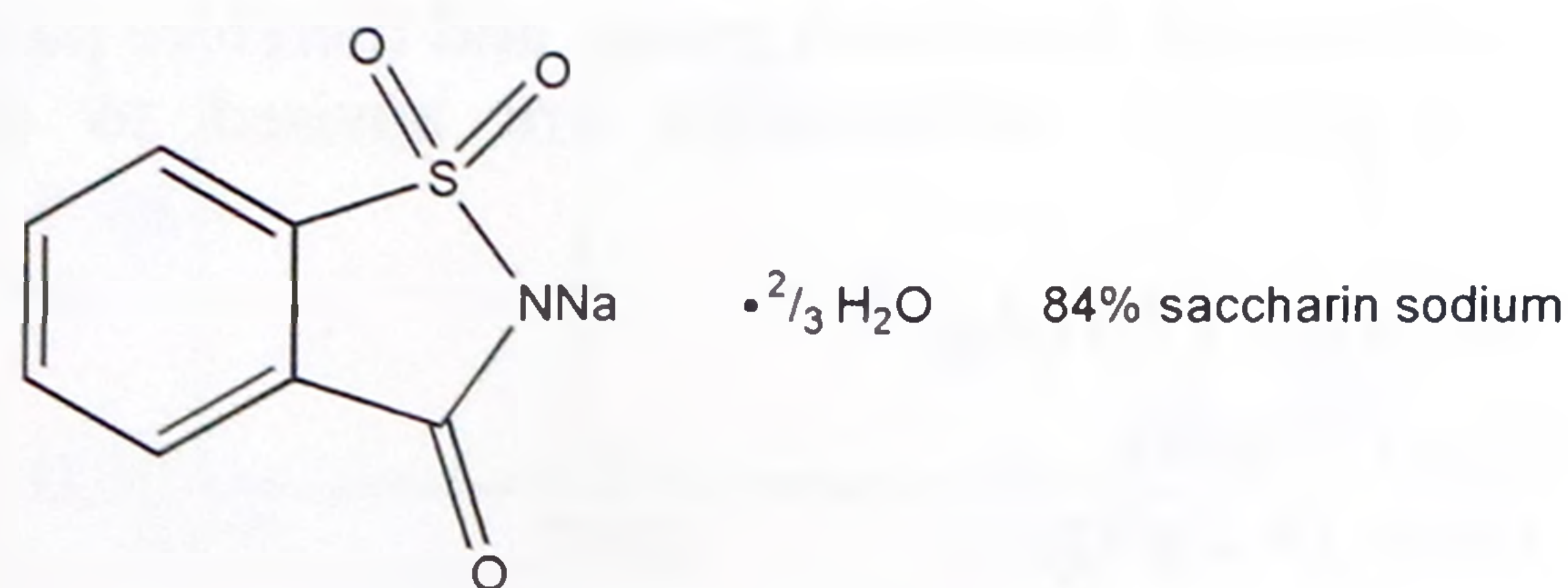
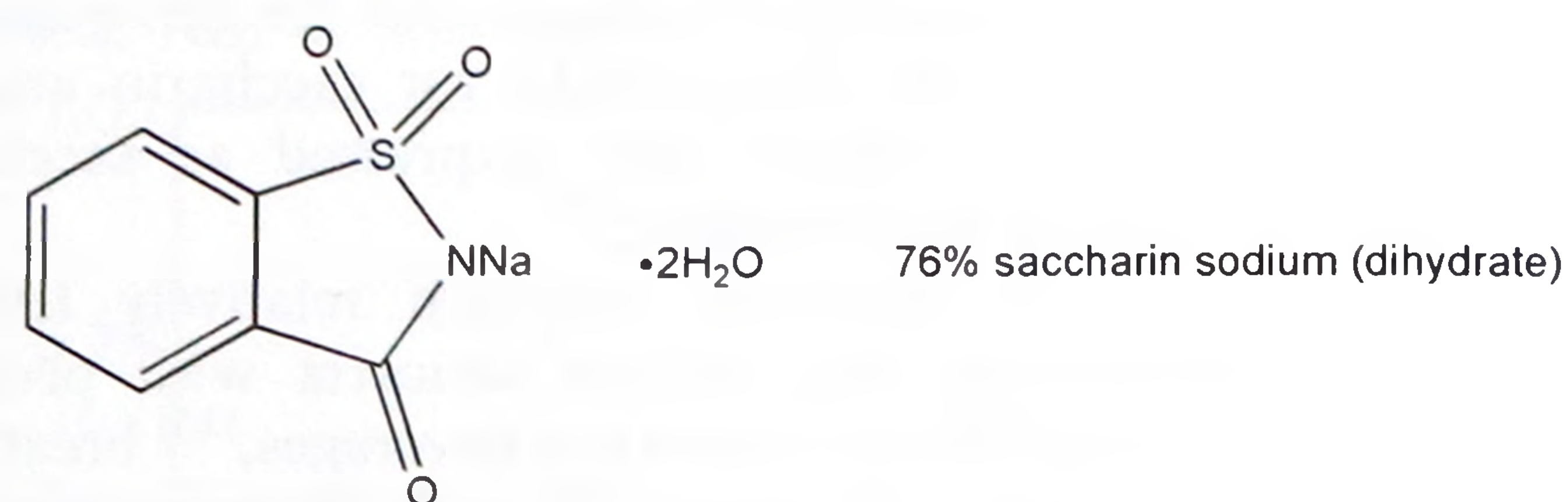
[6155-57-3] for the dihydrate

See also Section 8.

## 4 Empirical Formula and Molecular Weight

C <sub>7</sub> H <sub>4</sub> NNaO <sub>3</sub> S	205.16
C <sub>7</sub> H <sub>4</sub> NNaO <sub>3</sub> S· <sup>2</sup> / <sub>3</sub> H <sub>2</sub> O (84%)	217.24
C <sub>7</sub> H <sub>4</sub> NNaO <sub>3</sub> S·2H <sub>2</sub> O (76%)	241.19

## 5 Structural Formula



## 6 Functional Category

Flavoring agent; sweetening agent.

## 7 Applications in Pharmaceutical Formulation or Technology

Saccharin sodium is an intense sweetening agent used in beverages, food products, table-top sweeteners,<sup>(1)</sup> and pharmaceutical formulations such as tablets, powders, medicated confectionery, gels, suspensions, liquids, and mouthwashes;<sup>(2)</sup> see Table I. It has been used to mask the bitter taste of dental lidocaine injection for dental procedures.<sup>(3)</sup> It is also used in vitamin preparations.