

SODIUM HYDROGEN SULFATE

New specifications prepared at the 68th JECFA (2007), published in FAO JECFA Monographs 4 (2007). No ADI has been allocated to sodium hydrogen sulfate for use in production of acidified sodium chlorite. An ADI "not specified" was established for sodium sulfate at the 57th JECFA (2001) and no ADI was allocated for sulfuric acid at the 20th JECFA (1976).

SYNONYMS

Sodium acid sulfate; nitre cake; sodium bisulfate; sulfuric acid, monosodium salt.

DEFINITION

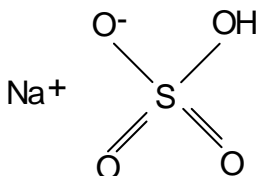
Sodium chloride and sulfuric acid are combined at elevated temperatures to produce molten sodium hydrogen sulfate. The molten sodium hydrogen sulfate is sprayed and cooled to form a solid product with uniform particle size.

C.A.S. number 7681-38-1

Chemical formula NaHSO_4

Formula weight 120.06

Structural Formula



Assay Not less than 85%

DESCRIPTION

White crystals or granules

FUNCTIONAL USES

For use in antimicrobial washing solutions

CHARACTERISTICS

IDENTIFICATION

Solubility (Vol. 4) Freely soluble in water

Sodium (Vol. 4) Passes test

Sulfate (Vol. 4) Passes test

PURITY

Loss on drying (Vol.4) Not more than 0.8% (105°, 3h, use 25 g of sample),

Water-insoluble matter
(Vol. 4)

Not more than 0.05% (Use 50 g of sample and 300 ml hot water)

Lead (Vol. 4)

Not more than 2 mg/kg

Determine using an AAS/ICP-AES technique appropriate to the specified level. The selection of sample size and method of sample preparation may be based on principles of methods described in Volume 4 (under "General Methods, Metallic Impurities").

Selenium (Vol. 4)

Not more than 5 mg/kg

Determine using an AAS/ICP-AES technique appropriate to the specified level. The selection of sample size and method of sample preparation may be based on principles of methods described in Volume 4 (under "General Methods, Metallic Impurities").

METHOD OF ASSAY

Accurately weigh about 5 g of sample, dissolve in 125 ml of water, and add phenolphthalein TS. Titrate with 1 N sodium hydroxide. Each milliliter of sodium hydroxide is equivalent to 120.06 mg of NaHSO₄.