SODIUM BENZOATE

PRODUCT IDENTIFICATION

 CAS NO
 532-32-1

 EINECS NO.
 208-534-8

 FORMULA
 C6H5CO2Na

 MOL WT.
 144.12

H.S. CODE 2916.31

TOXICITY Oral rat LD50: 4070 mg/kg

SYNONYMS Benzoate of soda: sodium salt of benzoic acid:

Benzoan sodny; Benzoate de sodium; Benzoate sodium; Benzoesaeure (German); NA-SALZ

Nor+

(German); Sobenate; Sodium Benzoic Acid; Ucephan; Benzoan Sodny (Czech);

DERIVATION

CLASSIFICATION

GENERAL DESCRIPTION

Sodium Benzoate (the sodium salt of benzoic acid) is a colorless or white crystalline powder or granular. It is soluble in water and slightly soluble in alcohol. It is used as one of the principal antimicrobial and antifungal preservatives used in foods, beverages, cosmetic, dental care products, and pharmaceuticals, but it's concentration is limited usually not exceeding 0.1% because it is poisonous. Antimicrobial activity is effective in acidic conditions (pH 4.5 or lower). The lower the pH level, the greater the effectiveness is expected. It is also used in medications, antifermentation additives and tabletting lubricant for pharmaceuticals. It may also be used as a test for liver function. The industrial applications are as a corrosion inhibitor in antifreeze products, as a nucleating agent for polyolefin, as a dye intermediate, and as a catalyst. Potassium Benzoate (the potassium salt of benzoic acid) is an alternative to sodium benzoate. Potassium Benzoate replaces sodium benzoate where low sodium content is required.

PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE White granules or crystalline powder

MELTING POINT 300 C

BOILING POINT

SPECIFIC GRAVITY 1.44
SOLUBILITY Soluble

рΗ

VAPOR DENSITY 4.97

NFPA RATINGS Health: 1; Flammability: 0; Reactivity: 0

REFRACTIVE INDEX

FLASH POINT

Stable under ordinary conditions

APPLICATIONS

food preservative, antiseptic medications, tobacco, tabletting lubricant for pharmaceutical, dyes intermediate, mildew inhibitor.

SALES SPECIFICATION

APPREARANCE	White crystalline or granular, Odourless powder
PURITY	99.0% min
HEAVY METALS	10ppm max
TOTAL CHLORINE	300ppm max
MOISTURE	0.5% max
ARSENIC	3ppm max

SOLUBILITY Pass test

ALKALINITY 0.04% max

TRANSPORTATION

PACKING 25kgs in bag

HAZARD CLASS not regulated

UN NO.

DESCRIPTION OF BENZOIC ACID

Benzoic acid, a white, crystalline organic compound, is a family carboxylic acids. It has a carboxyl group bound directly to a benzene ring. Though it occurs naturally in some plants, It is commercially manufactured by the reaction of toluene with oxygen at temperatures around 200 C in the presence of cobalt and manganese salts as catalysts. Pure benzoic acid melts at 122 C and is very slightly soluble in water. It is widely used as a food preservative, normally as the sodium, potassium, or calcium salts and their derivatives especially in acid foods. Benzoate preservatives applications in foods, drugs and personal products are well established. It is also widely as an intermediate for chemicals, alkyd resins, polyesters, plasticizers, dyestuffs, preservatives, and rubber activators and retardants. Benzoic Acid is a diverting agent in crude oil recovery applications.