

Benzoic Acid



Benzoic acid is a white crystalline organic compound with the chemical formula $C_7H_6O_2$. It's a naturally occurring compound found in certain fruits, such as cranberries, and is used as a food preservative due to its antimicrobial properties.

Application

1. Food Preservation: Benzoic acid and its salts, such as sodium benzoate, are commonly used as preservatives in various food and beverage products to inhibit the growth of bacteria, yeasts, and molds.
2. Acidic Properties: Benzoic acid is a weak acid that can react with bases to form benzoate salts. Its acidic nature contributes to its preservation properties.
3. Flavoring Agent: In addition to its preservative role, benzoic acid is sometimes used as a flavoring agent in foods and beverages.
4. Pharmaceuticals: Benzoic acid and its derivatives are used in the synthesis of various pharmaceutical compounds.
5. Industrial Applications: It's also used in industries such as cosmetics, plastics, and dyes.