SHANGHAI FREEMEN CHEMICALS CO.,LTD.
ADDRESS: SUITES 22G, SHANGHAI INDUSTRIAL INVESTMENT BLDG.,18 CAOXI RD.(N),SHANGHAI 200030,CHINA
TEL:021-64279170 Emai: ni.xiaohu@freemen.sh.cn

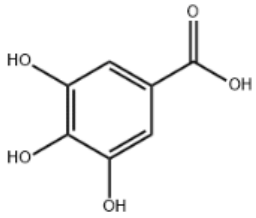
Product: **Gallic acid**

Gallic acid, is a colorless crystalline needles or prisms obtained from nutgall tannins. Gallic acid is soluble in water and alcohol and melts at 235 to 240 °C. Also known as trihydroxybenzoic acid, found in gallnuts, sumac, witch hazel, tea leaves, oak bark, and other plants, it is used in photography, tanning, ink manufacture and pharmaceuticals.

Alias: **Gallic acid, 5-Carboxybenzene-1,2,3-triol; Gallic acid, 5-Carboxybenzene-1,2,3-triol; Pyrogallol-5-carboxylic acid**

CAS No: **149-91-7**

Molecule structure



Specifications:

Appearance: Colorless crystalline needles or prisms

Gallic Acid Content (dry basis): 99.0%min

Tannie Acid Test: no cloudy

Water Dissolved Experiment: no cloudy

Chroma:180max

Turbidity:10max

[SO_4^{2-}]:0.02%max

[Cl^-]:0.01%max

Residue On Ignition:0.1%max

Packing & Delivery 25kg/bag

Not dangerous goods

Application ☑ Gallic acid is commonly used in the pharmaceutical industry. It is used as a standard for determining the phenol content of various analytes by the Folin - Ciocalteau assay; results are reported in gallic acid equivalents. Gallic acid was found to show cytotoxicity against cancer cells, without harming healthy cells. Gallic acid is used as a remote astringent in cases of internal haemorrhage. Gallic acid is also used to treat albuminuria and diabetes. Some ointments to treat psoriasis and external haemorrhoids contain gallic acid.

☑ Gallic acid is an important component of iron gall ink, the standard European writing and drawing ink from the 12th to 19th century with a

history extending to the Roman empire and the Dead Sea Scrolls. Pliny the Elder (23-79 AD) describes his experiments with it and writes that it was used to produce dyes. Galls (also known as oak apples) from oak trees were crushed and mixed with water, producing tannic acid (a macromolecular complex containing gallic acid). It could then be mixed with green vitriol (ferrous sulfate) — obtained by allowing sulfate - saturated water from a spring or mine drainage to evaporate — and gum arabic from acacia trees; this combination of ingredients produced the ink.

- ☑ It has also been used as a coating agent in zincography.
- ☑ It can be used to produce polyesters based on phloretic acid and gallic acid.
- ☑ Gallic acid is a potential bleaching agent and anti-oxidant, it is also astringent and potentially anti-microbial and anti-fungal. Scientists are finding that gallic acid may serve as a skin-lightening agent by inhibiting the action of the tyrosinase and peroxidase enzymes. Some studies indicate that it is more effective than

hydroquinone when combined with the proper ingredients. It is also incorporated into anti-aging formulations for its ability to prevent mucopolysaccaride deterioration.