Sodium fluoride

Product Number  S 1504
Store at Room Temperature

Product Description
Molecular Formula: NaF
Molecular Weight: 41.99
CAS Number: 7681-49-4
Melting Point: 993 °C

Sodium fluoride is a reagent that is used in a variety of large scale applications. These include electroplating, wood preservation, disinfection of fermentation equipment, and the manufacture of coated paper. NaF is also utilized as a constituent of vitreous enamel and glass mixes, and a steel degassing agent.\(^1\)

Sodium fluoride is an inhibitor of serine/threonine phosphatases.\(^2,3\) NaF is also an activator of G proteins.\(^4,5\) NaF has been shown to induce endothelial cell dysfunction, as indicated by increased albumin permeability and decreased transcellular electrical resistance.\(^6\) Sodium fluoride is also widely studied in bone and dental research.\(^7,8\)

Precautions and Disclaimer
For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions
This product is soluble in water (50 mg/ml), with heat as needed, yielding a clear, colorless solution. The pH of a freshly prepared saturated solution of NaF is 7.4.\(^1\) Aqueous NaF solutions will etch glass containers.

References
1. The Merck Index, 12th ed., Entry# 8762.