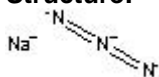


TECHNICAL INFORMATION

Catalog Number: 102891

Sodium Azide

Structure:



Molecular Formula: NaN₃

Molecular Weight: 65.0

CAS # 26628-22-8

Physical Description: White crystalline powder

pK: 4.8

Solubility: Soluble in water (100 mg/ml - clear, colorless solution); slightly soluble in alcohol and ethanol; insoluble in ether. In aqueous acidic solutions, sodium azide is converted to hydrazoic acid, a volatile gas.¹

Description: Commonly used as a preservative for laboratory reagents; a bacteriostatic agent in storage solutions. Inhibits gram negative flora so is therefore included in culture media for the selective isolation of Streptococci and Staphylococci.¹⁵ The typical effective concentration usually ranges from 0.02% to 0.1% (w/v). It is an inhibitor of peroxidase¹², myeloperoxidase³, superoxide dismutase¹³, galactose oxidase¹¹, catalase^{7,9} haemoprotein enzymes⁹ and O₂ evolution in photosynthesis.² The mechanism of its inhibition and toxicity may be due to metal ion complexation and displacement from enzymes.^{4,11} Has been used to avoid bacterial contamination during RPC-5 column chromatography of DNA fragments.¹⁷

CAUTION: Sodium Azide is highly toxic and highly reactive under certain conditions. Consult the MSDS before handling.

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