



## Product Information

### Sodium azide SigmaUltra

Product Number **S 8032**  
Store at Room Temperature

#### Product Description

Molecular Formula:  $\text{NaN}_3$   
Molecular Weight: 65.01  
CAS Number: 26628-22-8

Trace elemental analyses have been performed on the SigmaUltra sodium azide. The Certificate of Analysis provides lot-specific results. SigmaUltra sodium azide is for applications which require tight control of elemental content.

Sodium azide is a reagent used in the production of compounds which incorporate nitrogen in their structure, including pharmaceuticals and propellants.<sup>1</sup> Such compounds include purine and pyrimidine derivatives, pyrrolidines, azidoalcohols, and azidoamines.<sup>2,3,4,5</sup>

Sodium azide is also a commonly used preservative for laboratory reagents.

It is an inhibitor of horseradish peroxidase,<sup>6</sup> myeloperoxidase,<sup>7</sup> superoxide dismutase,<sup>8</sup> galactose oxidase,<sup>9</sup> catalase,<sup>10,11</sup> and  $\text{O}_2$  evolution in photosynthesis.<sup>12</sup> The mechanism of inhibition and toxicity may be due to metal ion complexation and displacement from enzymes.<sup>9,13</sup>

#### 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), yielding a clear, colorless solution. In aqueous acidic solutions, sodium azide is converted to hydrazoic acid, a volatile gas.<sup>1</sup>

#### References

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13. Friend, S. H., et al., Charge-site communication in proteins: electrostatic heme linkage of azide binding by sperm whale myoglobin. *Biochemistry*, **19(13)**, 3039-3047 (1980).

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