

Imidazole,100G**PG-7250-100G**

Imidazole is a high-purity heterocyclic organic compound widely used in molecular biology, biochemistry, protein purification, pharmaceutical research, and analytical chemistry. It is an essential reagent in immobilized metal affinity chromatography (IMAC), particularly for the purification of His-tagged recombinant proteins using Ni-NTA and Co²⁺ affinity resins. Imidazole also serves as a buffering agent and intermediate in various biochemical and chemical applications.

Parameter	Specification
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Product Name	Imidazole
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Chemical Name	1,3-Diazole
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Molecular Formula	C ₃ H ₄ N ₂
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Molecular Weight	68.08 g/mol
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Appearance	White to off-white crystalline powder
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Assay	≥ 99.0%
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Solubility	Freely soluble in water
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pH (1 M Solution)	9.5 – 10.5
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Melting Point	88–91°C
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Loss on Drying	≤ 0.5%
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Heavy Metals	≤ 10 ppm
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CAS Number	288-32-4
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Storage Condition	RT.
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Safety

Harmful if inhaled, swallowed, or absorbed through skin. Suspected carcinogen. May cause liver, kidney, and central nervous system damage following prolonged or repeated exposure. Use in a well-ventilated area and wear appropriate PPE including gloves, lab coat, and safety goggles. Avoid contact with skin, eyes, and clothing. Store away from heat and incompatible materials.