

Isoamyl Alcohol (3-Methyl-1-butanol) is a high-purity organic alcohol widely used in molecular biology, biochemistry, and nucleic acid purification workflows. It is commonly utilized as a component of Phenol:Chloroform Alcohol (PCI) and Chloroform Alcohol (CIA) mixtures for DNA and RNA extraction, where it helps reduce foaming and improves phase separation during purification procedures.

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### Details

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|--------------------------------------------|----------------------------------------------------------------|
| <b>Product Name</b>                        | Isoamyl Alcohol                                                |
| <b>Chemical Name</b>                       | 3-Methyl-1-butanol                                             |
| <b>Synonyms</b>                            | Isopentyl Alcohol, Isoamylol                                   |
| <b>Molecular Formula</b>                   | C <sub>5</sub> H <sub>12</sub> O                               |
| <b>Molecular Weight</b>                    | 88.15 g/mol                                                    |
| <b>Appearance</b>                          | Clear, colorless liquid                                        |
| <b>Purity</b>                              | ≥ 99.0%                                                        |
| <b>Density (20–25°C)</b>                   | 0.807–0.813 g/mL                                               |
| <b>Refractive Index (n<sub>20/D</sub>)</b> | 1.405–1.407                                                    |
| <b>Boiling Point</b>                       | 130–132°C                                                      |
| <b>Flash Point</b>                         | 43°C                                                           |
| <b>CAS Number</b>                          | 123-51-3                                                       |
| <b>Solubility</b>                          | Slightly soluble in water; miscible with most organic solvents |
| <b>Storage</b>                             | RT                                                             |

**Applications / Uses:** DNA Extraction and Purification, RNA Isolation Procedures, Phenol:Chloroform Alcohol (25:24:1) Preparation, Chloroform Alcohol (24:1) Preparation, Molecular Biology Research, Biochemical Analysis, Protein Purification Workflows, Organic Synthesis Applications, Laboratory Reagent Formulations etc.

### Safety

Generally regarded as non-hazardous under normal laboratory conditions. Avoid inhalation of dust and contact with eyes. Use appropriate laboratory PPE, including gloves, lab coat, and safety glasses. Store in a cool, dry place away from moisture.