

PMSF, 5g**PG-541-5G**

Phenylmethylsulfonyl Fluoride (PMSF) is a potent irreversible serine protease inhibitor widely used in protein purification, cell lysis, and biochemical research. PMSF inhibits serine proteases such as trypsin, chymotrypsin, thrombin, and proteinase K by covalently modifying the active-site serine residue, thereby protecting proteins from proteolytic degradation during extraction and purification procedures..

Parameter	Specification
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Product Name	Phenylmethylsulfonyl Fluoride (PMSF)
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Chemical Name	Phenylmethanesulfonyl Fluoride
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Molecular Formula	$C_7H_7FO_2S$
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Molecular Weight	174.19 g/mol
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Appearance	White crystalline powder
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Purity	≥ 99%
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Solubility	Soluble in ethanol, methanol, isopropanol, and DMSO; slightly soluble in water
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Melting Point	90–94°C
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CAS Number	329-98-6
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Storage Condition	Store at 2–8°C in a tightly closed container. Protect from moisture and light.
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Applications / Uses: Protein Extraction and Purification, Cell Lysis Buffer Preparation, Prevention of Proteolytic Degradation, Enzyme and Protein Research etc.

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.