

Sodium Dodecyl Sulfate (SDS)**PG-7220-1KG**

Sodium Dodecyl Sulfate (SDS), also known as Sodium Lauryl Sulfate (SLS), is a high-purity anionic detergent widely used in molecular biology, biochemistry, protein research, microbiology, and analytical laboratories. SDS is commonly employed for protein denaturation, cell lysis, nucleic acid extraction, membrane solubilization, and electrophoresis applications. It is an essential component of SDS-PAGE for protein separation and characterization.

Parameter Specification**Product Name** Sodium Dodecyl Sulfate (SDS)**Synonym** Sodium Lauryl Sulfate (SLS)**Chemical Formula** $C_{12}H_{25}NaO_4S$ **Molecular Weight** 288.38 g/mol**Appearance** White to off-white powder**Assay** $\geq 99.0\%$ **Solubility** Freely soluble in water**pH** (1% Solution) 6.0 – 9.5**Loss on Drying** $\leq 5.0\%$ **Heavy Metals** ≤ 20 ppm**CAS Number** 151-21-3**Critical Micelle Concentration (CMC)** Approximately 8 mM**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.