

CHAPS, 5G**PG-5640-5G**

CHAPS is a zwitterionic detergent widely used in molecular biology, biochemistry, proteomics, and membrane protein research. It combines the properties of bile acid-based detergents and sulfobetaines, providing efficient solubilization of membrane proteins while preserving their native structure and biological activity. CHAPS is particularly suitable for isoelectric focusing, two-dimensional electrophoresis, protein extraction, and enzyme studies..

Parameter	Specification
-----------	---------------

Product Name	CHAPS
---------------------	-------

Chemical Name	3-[(3-Cholamidopropyl) dimethylammonio]-1-propanesulfonate
----------------------	--

Molecular Formula	C ₃₂ H ₅₈ N ₂ O ₇ S
--------------------------	---

Molecular Weight	614.88 g/mol
-------------------------	--------------

Appearance	White to off-white crystalline powder
-------------------	---------------------------------------

Purity	≥ 98%
---------------	-------

Solubility	Freely soluble in water
-------------------	-------------------------

Critical Micelle Concentration (CMC)	6–10 mM
---	---------

pH (10% Solution)	5.0–7.5
--------------------------	---------

UV Absorbance (280 nm, 10% Solution)	≤ 0.5
---	-------

CAS Number	75621-03-3
-------------------	------------

Storage Condition	Store at 2–8°C in a tightly closed container. Protect from moisture and direct sunlight.
--------------------------	--

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.