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SDS

产品编号	产品名称	包装
ST626	SDS	80g

产品简介:

- SDS即Sodium dodecyl sulfate, 也称Dodecyl sodium sulfate或Lauryl sulfate sodium salt, 中文名为十二烷基硫酸钠, 又称为月桂醇硫酸钠。分子式为 $\text{CH}_3(\text{CH}_2)_{11}\text{OSO}_3\text{Na}$, 分子量为288.38, CAS Number 151-21-3。本产品适用于对于纯度要求不高的一些实验用途, 对于纯度要求较高的情况, 请选购碧云天的SDS(ST627)。
- 关于SDS ($\text{CH}_3(\text{CH}_2)_{11}\text{OSO}_3\text{Na}$)的中文名称存在一些争议, 经常被误称为十二烷基磺酸钠, 或者被解读为十二烷基磺酸钠。根据Wikipedia中硫酸盐的定义The sulfate or sulphate ion is a polyatomic anion with the empirical formula SO_4^{2-} , and sulfates are salts of sulfuric acid and many are prepared from that acid。似乎SDS ($\text{CH}_3(\text{CH}_2)_{11}\text{OSO}_3\text{Na}$)并不是传统意义上的硫酸盐, 好像并不能形成硫酸根离子(SO_4^{2-})。事实上, SDS ($\text{CH}_3(\text{CH}_2)_{11}\text{OSO}_3\text{Na}$)是一个硫酸酯盐, 1%水溶液pH6~7, 在pH4以上的水溶液中通常不会水解, 在pH2.5以下SDS ($\text{CH}_3(\text{CH}_2)_{11}\text{OSO}_3\text{Na}$)水解为月桂醇和硫酸氢钠的速度加快。十二烷基磺酸钠也确实存在, 其英文名为Sodium 1-dodecanesulfonate, 也被简称为SDS, CAS Number 2386-53-0, 分子式为 $\text{CH}_3(\text{CH}_2)_{11}\text{SO}_3\text{Na}$, 分子量为272.38, 两者仅相差一个O。但由于十二烷基磺酸钠制备较难、价格较高、难以提纯、储存稍久易发黄, 故很少用作实验试剂。因此实验室常规使用的SDS通常都是指Sodium dodecyl sulfate ($\text{CH}_3(\text{CH}_2)_{11}\text{OSO}_3\text{Na}$)。
- 本产品为白色粉末。
- 本产品为阴离子去垢剂, 常用于SDS-PAGE电泳、细菌、细胞裂解等需要变性蛋白的常规操作。SDS作为蛋白质的变性剂和助溶性试剂, 它能破坏分子内和分子间的氢键, 使分子去折叠, 破坏蛋白质的二级和三级结构, 几乎所有的蛋白质可以溶解在SDS中。SDS也可以作为去垢剂有效促进一些脂溶性物质的溶解。
- SDS易溶于水, 但其溶解度对温度敏感, 低温时SDS容易从溶液中析出。常配制成10%的储备液。

包装清单:

产品编号	产品名称	包装
ST626	SDS	80g
—	说明书	1份

保存条件:

室温保存。

注意事项:

- 本产品对人体有害, 操作时请小心, 并注意有效防护以避免直接接触人体或吸入体内。
- 本产品仅限于专业人员的科学研究用, 不得用于临床诊断或治疗, 不得用于食品或药品, 不得存放于普通住宅内。
- 为了您的安全和健康, 请穿实验服并戴一次性手套操作。

使用本产品的文献:

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Version 2024.03.12