



# Sodium Lauryl Sulphate

(Sodium Dodecyl Sulphate, SDS, SLS)

[151-21-3]

High quality SLS suitable for Dissolution Testing of Drugs to provide the most efficient SGF and SIF media

Sodium Lauryl Sulphate is a strong component of the media used for Dissolution Testing in *In-Vitro* methods for water-soluble and slightly-water-soluble drugs. It's importance as a media ingredient is undisputed thereby making it's quality a critical factor in the accuracy of results.

For a Pharmaceutical Quality Control Scientist, it has always been essential to study the relationship between an *In-Vitro* characteristic of a dosage form, and its *In-Vivo* performance. Disintegration Testing (introduced by U.S. Pharmacopoeia in 1950) was originally thought to be this characteristic. With advances in methodology, this was found to be too insensitive, and Dissolution Test methods were introduced by the U.S. Pharmacopoeia in 1968.

Dissolution is principally useful as a QC test. It can be predictive of *In-Vivo* behavior, but this must be demonstrated by an *In-Vivo In-Vitro Correlation (IVVC)* study. SLS of 95% ( $C_{12}$ ) purities had been effectively used till the 1990's, whereas and SLS of 99% ( $C_{12}$ ) are being used today in the routine Dissolution / Disintegration Testing for drugs. Although SLS extrapure AR, ACS (54468, 99%  $C_{12}$ ), is the most prevalent reagent in use, the R&D team at SRL have found a way to further improve this grade after almost 3 years of production improvement, testing and stability studies and pilot scale testing in collaboration with reputed pharmaceutical companies.

**SRL** is one of the first developers of the High Purity SLS of 99.5% ( $C_{12}$ ) which is fast-becoming the industry standard across the Pharma QC Testing, with many scientists now adopting the newer improved grade as a Protocol standard.



# SRL Sodium Lauryl Sulphate (SDS, SLS)

## Specification Comparison

Parameters	SLS extrapure AR, ACS (54468)	SLS High Purity (35825)
Appearance	White, crystalline powder	White, crystalline powder
Solubility	10%aq. solution is clear & colourless	10% aq. solution is clear & colourless
Assay	min.99% (by T and GC C <sub>12</sub> compd.)	min.99.5% (by T and GC C <sub>12</sub> compd.)
Loss on drying	max.1%	max.1%
pH(1% aq solution)	6.0 - 7.5	6.0 - 7.5
Chloride (Cl)	max.0.01%	max.0.01%
Phosphate (Po4)	max.0.0001%	max.0.0001%
Iron (Fe)	max.0.0001%	max.0.0001%
Heavy metals (Pb)	max.0.0002%	max.0.0002%
UV Absorbance	at A <sub>0.5%aq.</sub> 220 - 350nm (max.0.1)	A <sub>10%aq.</sub> 210nm (max.0.1)
		A <sub>10%aq.</sub> 220nm (max.0.06)
		A <sub>10%aq.</sub> 230nm (max.0.04)
		A <sub>10%aq.</sub> 260 nm (max. 0.02)
Pack sizes	100g, 250g, 500g, 1kg	25g, 100g, 500g

**SRL** SLS extrapure AR, ACS (54468) has been extensively used in the Pharmacopoeia Monograph defined Dissolution Testing for numerous drugs and has excellent performance characteristics, solubility and batch-to-batch efficacy. We are proud to claim that it is one of the most highly reliable & recommended products in the industry.

**SRL** SLS High Purity (35825) is the latest innovation and our latest product advancement studies have demonstrated that the SLS, offered in higher purities of 99.5% (C<sub>12</sub>), can,



- Eliminate further purification sometimes undertaken by the customer (foaming & other processes).
- Demonstrate exceptionally lower Lauryl Alcohol (LA) impurities.
- Improve testing accuracy and confirm lot-to-lot Bio-equivalence.
- Provide more consistent and reliable results in *In-Vitro* Testing and *Intrinsic Dissolution Rate (IDR)* studies.
- Result in more accurate Dissolution profiles (suitable to fast-release and slow-release drugs).
- Assist in detection of relevant product changes ensuring quality and consistent performance of final products.

We urge you to take the appropriate information from our Sales Team or inform us for any sampling requirement or queries relating to this product.

## Products frequently used in Dissolution Testing

Product Code	Product Name	Packing Unit
85801	Acetic Acid Glacial extrapure AR	500ml, 2.5lit
93602	Acetic Acid Glacial extrapure AR, ACS, ExiPlus™ (meets compendial specs of USP, BP, Ph.Eur)	500ml, 2.5lit
54908	Cholic Acid (Cholanic Acid)	25g, 100g, 500g
53645	Cholic Acid Sodium Salt (Sodium Chololate, SC)	25g, 100g, 500g
41143	Deoxycholic Acid (DC)	25g, 100g, 500g
96876	Deoxycholic Acid Sodium Salt (Sodium Deoxychololate, SDC)	25g, 100g, 500g
24532	Dichloromethane (DCM) extrapure AR (Methylene Chloride)	500ml, 1lit, 2.5lit
45368	Dichloromethane (DCM) extrapure AR, ACS, ExiPlus™ (Methylene Chloride) (meets compendial specs of USP, BP)	500ml, 2.5lit
10192	N,N-Dimethyldodecylamine N-Oxide (30%) Solution pure (Lauryldimethylamine N-oxide, LDAO, DDAO)	100ml, 500ml
58764	N,N-Dimethyldodecylamine N-Oxide (95%) extrapure (Lauryldimethylamine N-oxide, LDAO, DDAO)	5g, 25g
50056	Orthophosphoric Acid (85%) extrapure AR, ACS	500ml, 2.5lit
41421	Pancreatin 4NF extrapure (SIF for Gelatin Capsules)	100g, 500g
37740	Pancreatin 3× extrapure (SIF for Gelatin Capsules)	100g, 500g
12647	Pepsin 1:3000 ex. Porcine Stomach Mucosa extrapure (SGF for Gelatin Capsules)	25g, 100g, 500g
48062	Pepsin 1:10000 ex. Porcine Stomach Mucosa extrapure (SGF for Gelatin Capsules)	25g, 100g, 500g
11787	Pepsin 1:10000 ex. Porcine Stomach Mucosa extrapure AR (SGF for Gelatin Capsules)	25g, 100g, 500g
63364	Pepsin 2× Cryst ex. Porcine Stomach Mucosa extrapure (SGF for Gelatin Capsules)	100mg, 250mg, 1g, 5g, 25g
50451	Potassium Dihydrogen Orthophosphate extrapure AR (Potassium Phosphate Monobasic)	500g, 5kg
78297	Potassium Dihydrogen Orthophosphate extrapure AR, ACS, ExiPlus™ (Potassium Phosphate Monobasic) (meets compendial specs of BP)	500g, 5kg
38630	Potassium Chloride extrapure AR	500g, 5kg
50016	Potassium Chloride extrapure AR, ACS, ExiPlus™ (meets compendial specs of USP, BP, Ph.Eur)	500g, 5kg
51483	Sodium Acetate Anhydrous extrapure AR, ACS, ExiPlus™ (meets compendial specs of USP, BP, Ph.Eur)	250g, 500g
74537	Sodium Acetate Anhydrous extrapure AR	250g, 500g
54966	Sodium Acetate Trihydrate extrapure AR	500g
44981	Sodium Acetate Trihydrate extrapure AR, ACS, ExiPlus™ (meets compendial specs of BP)	500g
41721	Sodium Chloride extrapure AR	500g, 1kg, 5kg
76945	Sodium Chloride extrapure AR, ACS, ExiPlus™ (meets compendial specs of USP, BP)	500g, 1kg, 5kg
97971	Sodium Glycochenodeoxycholate (SGCDC)	100mg, 500mg, 1g, 5g, 25g
31287	Sodium Glycocholate Dried (SGC Dried)	500mg, 1g, 5g, 25g
15556	Sodium Glycocholate Hydrate (SGC Hydrate)	500mg, 1g, 5g, 25g



Product Code	Product Name	Packing Unit
68151	Sodium Hydroxide Pellets extrapure AR	500g, 5kg
13913	Sodium Hydroxide Pellets extrapure AR, ACS, ExiPlus™ (meets compendial specs of USP, BP)	500g, 5kg
99671	Sodium Lauryl Sulphate for HPLC	10g, 25g, 100g, 1kg
34378	Sodium Lauryl Sulphate BP	1kg
32096	Sodium Lauryl Sulphate for molecular biology	25g, 100g, 500g, 1kg
85369	Sodium Lauryl Sulphate 10% Solution	100ml
87547	Sodium Lauryl Sulphate 20% Solution	250ml
22249	Sodium Phosphate Monobasic Anhydrous extrapure AR (Sodium Dihydrogen Phosphate Anhydrous)	500g
40597	Sodium Phosphate Monobasic Dihydrate extrapure AR (Sodium Hydrogen Phosphate Dihydrate)	500g, 5kg
79088	Sodium Phosphate Monobasic Dihydrate extrapure AR, ExiPlus™ (Sodium Hydrogen Phosphate Dihydrate) (meets compendial specs of USP)	500g
58529	Sodium Taurochenodeoxycholate (STCDC)	250mg, 500mg
63703	Sodium Taurocholate Hydrate (STC Hydrate)	1g, 5g, 25g, 100g
57861	Sodium Taurodeoxycholate Dried (STDC Dried)	500mg, 1g, 5g, 25g
40391	Sodium Taurodeoxycholate Hydrate (STDC Hydrate)	500mg, 1g, 5g, 25g
89320	Soya Lecithin (30%) (a natural phospholipid from soy beans)	100g, 500g, 2.5kg
79420	Tris Buffer Superior extrapure AR, ACS	100g, 500g, 1kg, 5kg
71033	Tris Buffer AR, ACS for molecular biology	100g, 500g, 2.5kg, 5kg
52682	Trypsin ex. Bovine Pancreas (0.2 Anson units/g) (2000 units/g)	100g, 500g, 1kg
74055	Trypsin 1:250 ex. Bovine Pancreas	25g, 100g, 500g
60484	Trypsin 3× cryst. ex Bovine Pancreas (7500 BAEE units/mg (2500 NFU/mg))	250mg, 1g, 5g
92605	Water for HPLC	1lit

*Bulk packs available on request*

Please contact: