Biological Detergents

Non-ionic, Ionic & Zwitterionic

SRL's myriad range of Detergents act as surfactants and emulsifiers having applications in bioresearch such as Cell lysis, Electrophoresis, Immunoassays, Membrane solubilization and in bulk productions and sophisticated purification applications to facilitate structural and biophysical characterization of important membrane proteins such as ion channels, transporters, signaling receptors, and photosystems.

Non-ionic detergents

Non-ionic detergents have uncharged and hydrophilic head groups & are considered mild surfactants as they break protein-lipid, lipid-lipid associations, but not protein-protein interactions. Most of them do not denature proteins.

Key Factors:

- Preferred for the isolation of membrane proteins.
- Generally used to lyse cells (i.e. to release soluble proteins).
- Considered as non-denaturants.
- Solubilize protein and isolate them in their native and active form, retaining their protein interactors.
- CMC (Critical micelle concentration) of a non-ionic detergent is relatively unaffected by increasing ionic strength, but increases substantially with rising temperature.

Brij®

Prdt. Code	Product Name	CAS No.	Packing Unit
93883	Brij-30® (Polyethylene Glycol Dodecyl Ether, Brij-L4)	9002-92-0	500ml, 1000ml
89429	Brij-35® (Main component) (Polyoxyethylene Lauryl Ether, Brij-L23, C12E23)	9002-92-0	250g, 500g, 1kg
97698	Brij-35® (30% Aq. solution) (Polyoxyethylene Lauryl Ether, Brij-L23, C12E23)	9002-92-0	100ml, 500ml
43808	Brij-58® (Polyethylene Glycol Cetyl Ether, Cetomacrogol 1000, C16E20)	9004-95-9	500 g

Polysorbates (Tween®)

High Quality Emulsifying Agents for the Pharmaceutical & Food Industries

Prdt. Code	Product Name	CAS No.	Packing Unit
28599	Polysorbate 20	9005-64-5	500g
23610	Polysorbate 20 #	9005-64-5	500g
65296	Polysorbate 20 *	9005-64-5	100g, 500g
31453	Polysorbate 40	9005-66-7	250g
62539	Polysorbate 40 #	9005-66-7	250g
12502	Polysorbate 60	9005-67-8	100g ,500g
86878	Polysorbate 60 #	9005-67-8	500g
28940	Polysorbate 80	9005-65-6	500g
95188	Polysorbate 80 #	9005-65-6	500g

SPAN®

Prdt. Code	Product Name	CAS No.	Packing Unit
62016	Sorbitan Monolaurate(SPAN 20®)	1338-39-2	500ml, 2500ml
78338	Sorbitan Monooleate(SPAN 80®)	1338-43-8	500ml, 2500ml
36179	Sorbitan Monostearate(SPAN 60®)	1338-41-6	500g

Triton-X®

Prdt. Code	Product Name	CAS No.	Packing Unit
30190	Triton X-100 scintillation	9002-93-1	100ml, 500 ml, 1000ml
64518	Triton X-100*	9002-93-1	50ml, 100ml, 500ml

Other Non-Ionic Detergents

Prdt. Code	Product Name	CAS No.	Packing Unit
83040	Diethylene Glycol(Digol)	111-46-6	500ml, 2500ml, 25ltr
85755	n-Dodecyl-b-D-Maltopyranoside (DDM) (Dodecyl-maltoside)	69227-93-6	500mg, 1g
60507	Octyl a-D-Galactopyranoside	149342-80-3	50mg, 250mg
25253	Octyl a-D-Glucopyranoside	29781-80-4	100mg, 250mg
63777	Octyl b-D-Galactopyranoside	40427-75-6	50mg, 250mg
33134	Octyl b-D-Glucopyranoside	29836-26-8	1g, 5g
33910	Octylphenyl Polyethylene Glycol (IGEPAL CA-630®)*	9002-93-1	100ml, 500ml
80967	Saponin	8047-15-2	25g, 100g
69538	Sucrose Palmitate	26446-38-8	25g
58128	Tetradecyl Sulphate Sodium Salt (Tergitol-4)	1191-50-0	100mg, 500mg
29740	Tetramethylammonium Hydroxide Pentahydrate	10424-65-4	5g , 25g, 100g

** Molecular Biology grade (DNase, RNase, Protease not detected)*

 # ExiPlus Grade - Meets Compendial Specs of Pharma Grade

Ionic detergents

Ionic detergents have a hydrophilic head group that is charged and can be either negatively (anionic) or positively (cationic) charged. They are useful for dissociating protein-protein interactions.

Key Factors:

- Used for the complete disruption of cellular structures and denaturation of proteins for separation during gel electrophoresis.
- Bind with protein molecules, masking their native charge and rendering the protein molecules the overall charge of the ionic detergent.
- Due to their charged head groups, ionic detergents cannot be removed by ion exchange chromatography.
- Generally have higher CMC value than non-ionic detergents.
- The CMC of an ionic detergent is reduced by increasing the ionic strength of the medium, but relatively unaffected by changes in temperature.

Anionic Detergents

Prdt. Code	Product Name	CAS No.	Packing Unit
54908	Cholic Acid (Cholanic Acid)	81-25-4	25g, 100g, 500g
53645	Cholic Acid Sodium Salt (Sodium Cholate)	361-09-1	25g, 100g, 500g
41143	Desoxycholic Acid	83-44-3	25g, 100g, 500g
96876	Desoxycholic Acid Sodium Salt (Sodium Deoxycholate)	145224-92-6	25g, 100g, 500g
74090	N-Lauroylsarcosine Sodium Salt	137-16-6	5g, 25g, 100g
43904	Lithium Lauryl Sulphate	2044-56-6	5g, 25g
97971	Sodium Glycocheno Deoxycholate (SGCDC) (Glycochenodeoxycholic Acid Sodium Salt)	16564-43-5	100mg, 500mg, 1g, 5g, 25g
15556	Sodium Glycocholate Hydrate (SGC) (Glycocholic Acid Sodium Salt Hydrate)	207614-05-9	500mg, 1g, 5g, 25g
31287	Sodium Glycocholate Dried (SGC) (Glycocholic Acid Sodium Salt)	863-57-0	500mg, 1g, 5g, 25g
54468	Sodium Lauryl Sulphate (99%)(SLS, SDS)	151-21-3	100g, 250g, 500g, 1000g
32096	Sodium Lauryl Sulphate (99%)*(SLS, SDS)	151-21-3	25g, 100g, 500g, 1000g
14374	Sodium Lauryl Sulphate (SLS, SDS)	151-21-3	500g, 5kg
34378	Sodium Lauryl Sulphate BP	151-21-3	1Kg
35825	Sodium Lauryl Sulphate High Purity (99.5%)	151-21-3	25g,100g, 500g
85369	10% Sodium Lauryl Sulphate Solution (SLS, SDS)	–	100ml
87547	20% Sodium Lauryl Sulphate Solution (SLS, SDS)	–	250ml
58529	Sodium Taurochenodeoxycholate (STCDC) (Taurochenodeoxycholic Acid Sodium Salt)	6009-98-9	250mg, 500mg
63703	Sodium Taurocholate Hydrate (STC Hydrate)	345909-26-4	1g, 5g, 25g, 100g
40391	Sodium Taurodeoxycholate Hydrate (STDC) (Taurodeoxycholic Acid Sodium Salt Hydrate)	207737-97-1	500mg, 1g, 5g, 25g
57861	Sodium Taurodeoxycholate Dried (STDC) (Taurodeoxycholic Acid Sodium Salt)	1180-95-6	1g, 5g, 25g

Cationic Detergents

Prdt. Code	Product Name	CAS No.	Packing Unit
81586	Cetrimide (Tetradecyltrimethyl Ammoniumbromide)	1119-97-7	100g, 500g
66302	Cetyltrimethyl Ammonium Bromide (CTAB)	57-09-0	50g, 100g, 500g
12779	Cetyltrimethyl Ammonium Bromide (CTAB)*	57-09-0	50g, 100g, 500g

Zwitterionic detergents

Zwitterionic detergents have characteristics of both ionic and non-ionic detergent types. Zwitterionic detergents are less denaturing than ionic detergents and have a net neutral charge, similar to non-ionic detergents.

Key Factors:

- Suited for breaking protein-protein interactions.
- Protect the native state of proteins without altering the native charge of the protein molecules.
- Used for chromatography, mass spectrometry, electrophoresis – i.e. isoelectric focusing and 2D electrophoresis.

Prdt. Code	Product Name	CAS No.	Packing Unit
66466	Big CHAPS (N,N'-Bis(3-D-Gluconamidopropyl) Cholamide)	86303-22-2	500mg, 1g, 5g
87868	CHAPS Buffer (3-[(3-Cholamidopropyl)Dimethylaminonio]-1 -Propanesulphonate)	75621-03-3	1g, 5g, 10g
21420	CHAPS Buffer* (3-[(3-Cholamidopropyl)Dimethylaminonio]-1 -Propanesulphonate)	75621-03-3	1g, 5g, 10g
66903	CHAPSO Buffer (3-[(3-Cholamidopropyl)Dimethylammonio]-2 -Hydroxy1-Propanesulphonate)	82473-24-3	1g, 5g
40133	Deoxy Big CHAPS (N,N'-Bis(3-D-Gluconamidopropyl)- Deoxycholamide)	86303-23-3	500mg
40396	DDAPS (N-Dodecyl-N,N-Dimethyl-3-Ammonio-1 -Propanesulfonate, Lauryl sulfobetaine)	14933-08-5	2g, 10g, 50g
58764	DDAO (N,N-Dimethyldodecylamine N-Oxide (95%))	1643-20-5	5g, 25g
10192	DDAO (30%) Solution (N,N-Dimethyldodecylamine N-Oxide)	1643-20-5	100 ml, 500ml

** Molecular Biology grade (DNase, RNase, Protease not detected)*

Bulk packs available on request

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