

Table. Surfactant systems reported to form wormlike micelles and techniques used in their characterization, following the classification described in the text.

Surfactant	Salt/co-surfactant	Characterization techniques	reference
1. Ionic surfactants			
CTAC			98
CTAB		SAXS	98
		density, viscosity, RI, LS	99
		NMR	100
		LS	4
CPBr		Magnetic birefringence, viscosity	101
CTAT		rheology	35
2. Surfactant + simple salts			
CTAB	KBr	Rheology, LS	102
	KBr	LS	103
	KBr/KCl	SANS	104
CTAC	NaSal/NaCl	Rheology	105
SDS	NaBr	SANS	30
SDS	DTAC/DTAB/ NaCl/NaBr/NaN O ₃	LS	106
SDS	NaCl	LS	107
		SANS	31
SDES	AlCl ₃ , MgCl ₂ , CaCl ₂ , NaCl	Rheology, FF-TEM	108
EHAC, ETAC	NaCl	rheology	109
EHAC	NaCl	Rheology, SANS, Cryo-TEM	110
EHAC	KCl	rheology	111
EHAC	NaCl	Rheology, flow-SALS/SANS	112
SSPOM	NaCl	LS	91
3. Surfactant + hydrotropes			
CTAB	NapTS/NaSal	Rheology, NMR	58
CPCI	NaSal	Rheology	113
1-alkyl-4- <i>n</i> -dodecylpyridinium	Halides, alkanesulfonates, aromatic counterions	Conductometry, NMR	114
		Microcalorimetry	115

CPBr	NaSal + NaCl	T-jump and rheology	116
CTAB	SHNC	SF, NMR	117
CTAOH	2,1-HNC	FF-TEM, cryo-TEM, conductivity, SANS	118
NaOA	Et ₃ NHCl/KCl	Rheology, SANS	119
EHAC, ETAC	NaSal	rheology	109
EHAC	NaSal	Rheology, flow-SALS/SANS	112
SHS/STS	R ₃ tolX/C ₅ R ₃ NBr	rheology	60
SDS	PTHC	LS, rheology, NMR	59
4. Surfactant and co-surfactant			
SDS	Decanol	NMR, rheology	120
CTAB	4-ethylphenol	Cryo-TEM, NMR, SANS	121
EHAC	Propanol + KCl	LS, rheology	122
CPCI	Hexanol	Viscosimetry, LS	61
C ₁₀ E ₅	dodecanol	LS	123
Diamines	Fatty acids	NMR, microscopy, SANS	62
5. Non-ionic surfactants			
C ₁₂ E ₅		Cryo-TEM, LS	124
C ₁₆ E ₆		LS, SANS	93
C ₁₀ E ₅ / C ₁₄ E ₇	C ₁₄ E ₅	LS	125
C ₈ F ₁₇ SO ₂ (C ₃ H ₇)(CH ₂ -CH ₂ O) ₁₀ H		Rheology, LS, SAXS	63
C ₉ G ₁		LS, SANS	96
C ₁₄ G ₂		LS, ST, SANS	95
C ₉ G ₁ , C ₁₀ G ₁ , C ₁₂ G ₂ , C ₁₄ G ₂		Rheology	126
C ₈ G ₁	C ₁₂ E ₄	ST, viscosity	127
C _{8/10} G _{1.5}	hexanol	LS, SANS	38
C ₁₀ G ₁	C ₉ G ₁	Cryo-TEM, NMR, fluorescence	128
C ₁₆ SE	C ₁₂ E _n /MG-12	LS, rheology	129
C ₁₆ SE	C ₁₂ E ₃ /MG-12	LS, SAXS, rheology	130
C ₈ SE, C ₁₂ SE, C ₁₆ SE	C ₁₂ E _n /MG-12/MG-8	Rheology, SAXS	65
ChE _m	C ₁₂ E ₃	LS, rheology	131
ChE _m	C ₁₂ E ₃	SAXS, SANS	132
ChE ₁₅	NMEA- <i>n</i>	rheology	133
PhyEO _m	C ₁₂ E _n	rheology	134
PhyEO _m	C ₁₂ E ₄	SAXS	135
6. Cationic/Anionic mixtures			
SDS	DTAB	SANS	69
CTAT	SDBS	Rheology, SANS	70
CTAT	SDBS	Rheology, SANS	41
NaOA	CTAB	Rheology, SANS	136
7. Ionic and non-ionic mixtures			

SDS	C ₁₂ G ₂	SANS	137
SDS	C ₁₂ E ₆	SANS	138
SDS	C ₁₀ G	LS, SANS	97
SDS	C ₁₂ E ₆	SANS	139
EHAC	C ₁₈ E ₁₈	SANS, rheo, cryo-TEM	140
EHAC	C ₁₂ E ₂₀	SANS	141
SDS	C ₁₂ E _n	Rheology, SAXS	142
CTAB	C ₁₆ SE/C ₁₂ E ₃	rheology	130
CTAB	C ₁₆ SE/C ₁₂ E _n	Rheology	143
NMEA-12 /-16	CTAB/DTAB	Rheology	144
NMEA-8 ~ -16	SDS	LS, rheology	145
C ₁₆ E ₆	C ₁₆ SO ₃ Na	LS, SANS	94
C ₁₂ E ₆ + sodium dodecyl sulphate (SDS)	SDS, SDE ₆ S	LS, SANS	71
Octylamine	Octanoic acid	LS, SANS	146
8. Zwitterionic surfactants			
Oleyldimethylamine oxide	SDS/C-14TMAB:	LS, rheology	72
Dimmer acid betaine		Rheology	73
9. Gemini surfactants			
<i>12-2-12</i>	DTAB	LS	147
<i>12-2-12</i>		LS, T-jump, rheology	148
<i>12-2-12</i>		Cryo-TEM	149
Dissymmetric Gemini <i>n-2-m</i>		Cryo-TEM, FF-TEM, X-ray diffraction	150
Sugar-based gemini		LS, fluorescence, cryo-TEM, NMR	74
GS	C ₁₂ E ₃ /C ₁₆ E ₄	Rheology	151
10. Biological surfactants			
lecithin			76
Lecithin	Phosphatidylglycerol/lysophosphatidylcholine	IR, rheology	152
Lecithin	Sodium deoxycholate	Rheology, SANS	79
Lecithin	Isopropyl myristate	SAXD, PCS, NMR	77
Lecithin	Fatty acid esters	Rheology, PGSE-NMR, SAXS, microscopy	78
Lecithin	GCDC acid sodium salt	SANS	40
DMPC	DMPC C ₁₂ E ₅	LS	81
DLPU		SANS, LS, cryo-TEM	82
DLPU/DLPA		SANS, LS	83
DLPU/DLPA		LS, cryo-TEM, CD	84
11. Block-copolymers			
PEO-PB, PEO-PEE		SANS, cryo-TEM	87
PEO-PB (E ₄₀ B ₁₀ , E ₁₈ B ₁₀)		SANS	88

Pluronic (P84)	NaCl	LS, SANS, viscometry	153
PS-PEO		TEM, viscosimetry, LS	154, 155
PEO-PB (E ₁₈ B ₁₀)		SANS	156
PEO-PDEAMA		TEM	157
PS-PVP-PEO		SEM, TEM	158
PEO-PS(-PEO)		UV, NMR	89

List of common abbreviations used:

C_mE_n: polyoxyethylene alkyl ether
C₈F₁₇SO₂(C₃H₇)(CH₂-CH₂O)₁₀H: perfluoroalkyl sulphonamide ethoxylate
C-14TMAB: tetradecyltrimethylammonium
C₁₆SE: Sucrose hexadecanoate
C₁₆SO₃Na: 1-hexadecane sulfonic acid
C_nG₁: *n*-alkyl-β-glucopyranoside
C_nG₂: *n*-alkyl-β-maltopyranoside
ChE_m: Polyoxyethylene cholesteryl ether
CPCI: cetylpyridinium chloride
CTAB/CTAC/CTAT/CTAOH: cetyltrimethylammonium bromide/chloride/ tosilate/hydroxide
DLPA: Dilauroyl-phosphatidyl-adenosine
DLPU: Dilauroyl-phosphatidyl-uridine
DMPC: DL-α-phosphatidylcholine dimyristoyl
DTAC/DTAB: dodecyltrimethylammonium chloride/bromide
EHAC: Erucyl bis(hydroxyethyl)methylammonium chloride
ETAC: Erucyl trimethylammonium chloride
GCDC: Glycochenodeoxycholic
GS: disodium 2,3-didodecyl-1,2,3,4-butanetetracarboxylate
2,1-HNC: 2,1-hydroxy-1-naphthoic
MG-12/-8: monolaurin/monocaprylin
NaOA: sodium oleate
NapTS/NaSal: sodium *p*-toluenesulfonate/salicylate
NMEA-*n*: alkanoyl-*N*-methylethanolamide
NMEA-12 /-16: *N*-hydroxyethyl-*N*-methyl dodecanamide/-methylhexadecanamide
PB: poly(ethylene oxide)-poly(butadiene)
PDEAMA: poly (N,N-diethylaminoethyl methacrylate)
PEE: poly(ethylene)ethylene
PEO: poly(ethylene oxide)
PhyEO_m: polyoxyethylene phytosterol
PS: polystyrene
PVP: poly(vinylpyridine)
PTHCl: *p*-toluidine hydrochloride
SDBS: sodium dodecyl benzene sulfonate
SDES: sodium trioxyethylene sulfate
SDE₆S: sodium dodecyl hexa(ethylene oxide) sulfate
SHNC: sodium 3-hydroxynaphthalene-2-carboxylate
SHS/STS: sodium hexadecyl sulphate/tetradecyl sulfate
SSPOM: Sodium sulfopropyl octadecyl maleate
R₃tolX/C₅R₃NBr: *p*-toluidine halides/pentylammonium bromides
12-2-12: 12-2-12(dimethylene-1,2-bis(dodecyldimethylammonium bromide))

Techniques:

CD: circular dichroism
FF-TEM: freeze-fracture transmission electron microscopy
PGSE-NMR: pulsed gradient spin-echo NMR
LS: light scattering
RI: refractive index
SF: surface tension