

Title of the manuscript: Cloud Point and Microemulsion Phase Behavior of Sodium linearalkylbenzene sulphonate (NaLAS) with tetrabutyl- and benzyltributyl-substituted ammonium salts.

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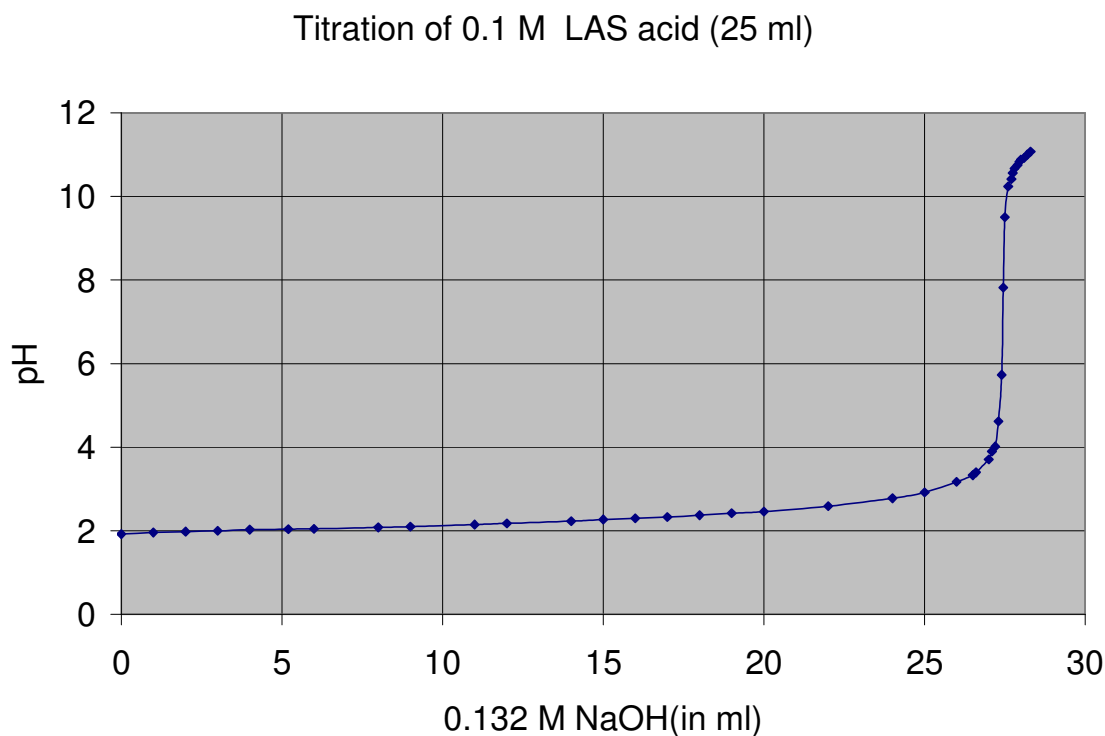
Supporting Documents:

The Chemical composition of the raw material (Linear alkyl benzene sulphonic acid), from which sodium salt of linear alkyl benzene sulphonate is prepared, is estimated by a standard analytical technique (UOP 673).

Components of LAS-acid	Wt. %	Chain length of Active LAS acid	Chain length Distribution (wt.%)
	95.5	C9	1
		C10	10
		C11	35
		C12	33
		C13	20
		≥C14	1
Isoalkylate	4		
Non-active organic matter	0.5		
Water	0.02		

Table 1: Chemical composition of LAS acid as well as chain length distribution of Active LAS acid.

LAS acid was reacted with sodium hydroxide (AR grade, Aldrich) in a stoichiometric amount in aqueous medium to prepare Na-LAS. The titration curve of the reaction is given below.



As may be seen from the above figure, complete neutralization of LAS-acid with NaOH occurs when $\frac{d(\text{pH})}{d(v)}$ is maximum, where pH is of solution and V is the volume of aq. NaOH. The point of maximum derivative occurs at pH of 7.82. The Na-LAS solution thus used in the study had a pH of 8.0.