

## 2.PROPERTIES AND USES

### (a)Typical properties of alkyl aryl sulfonate.

* Appearance of sol at 20°C	Clear liquid
* Viscosity at 25°C (Pa-sec)	0.0045
* Surface tension of 0.1% active material (N/m)	0.03
* Foam height of 0.1% active material solution	Initial (cm) Final (after 5 min) (cm)
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* Chromatogram	Emerald green (turquoise)
* Ultraviolet absorption $\lambda_{\max}$ (m $\mu$ )	225
* Saybolt color of the alkyl aryl sulfonate	+26
* Primary biodegradation OECD confirmatory test %MBAS/BiAS/DAS removal	90--95

* Ionic nature	anionic
* Electrolytic dissociation	yes
* Molecular weight	348

**(b) Uses of alkyl aryl sulfonates:**

Alkyl aryl sulfonates are used in different fields because of their effective performance. Apart from its effective performance it has very interesting foaming characteristics, which are of great significance to its use in detergents. They are used for home laundering, household and industrial washing operations, textile washing, bleaching and degreasing treatments, home-dish washing and for cleaning, dairy apparatus and installations.

As a result of its high solubility it is employed in formulations for liquid detergents. They are recommended in liquid form for cleaning painted surfaces to remove dirt without affecting the luster, as well as for cleaning automobiles to restore brilliancy to surfaces soiled by the weather.

They are also used for treating pigments in making water colors and for finishing paper, as additives for cement, as well as wetting and spreading insecticides and herbicides and to improve their penetration. They can also be used in mixtures with sodium bisulfate or with alkaline builders in compounding industrial cleaning agents. In addition, the surface activities of these compounds makes them suitable in the treatment of ores, as collectors and forming agents and in the paper industry for making ground wood for mechanical pulp, separation of fibres, bleaching and rinsing.