## ST520

## (Bactericidal \& Antiseptic Agent)

ST 520 is a cationic surface active agent of quaternary ammonium salt. Since late 1950 s' the quaternary ammonium salt has been using as a strong bactericidal and antiseptic agent. ST520 is the final product that made by extracted base materials from coconut oil and derivative amine. It guarantees to get a high phenol coefficient.

## - SPECIFICATIONS ■

- Appearance : Light Yellowish Transparent Liquid
- Chemical Component : Quaternary fatty ammonium salt
- Ionicity
: Cation
- pH(5\%, aq. Solution) : 6.0~8.0
- Solubility : Easily soluble in cold water
- Active Contents(\%) : 50~52.0


## - FEATURES

1. Germicidal Power

ST520 has strong a germicidal power.
(Unit : Phenol Coefficient)

| Item of Bacterium | $\mathbf{2 0}{ }^{\circ} \mathrm{C}$ | $\mathbf{3 7}{ }^{\circ} \mathrm{C}$ |
| :--- | :---: | :---: |
| Staphylococcus Aureus | 300 | 406.87 |
| Ebesthella Typhon | 250 | 425.62 |
| Streptococcus Haemolyticus | 435 | 425.62 |
| Streptococcus Pyogenes | - | 241.87 |
| Streptococcus Viridans | 383.75 | 433.75 |
| Escherichia Coli | 160 | 358.12 |

2. Stability

ST520 is very stable, and its germicidal power does not change under the normal storage.
3. Influence of pH

The germicidal power of ST520 is more powerful in alkaline side than low pH range. It is recommendable to use sodium phosphate that ST520 works on well in alkaline side.
4. Toxicity

According to the level of using concentration, ST520 is nontoxic. The following is the limit of dosage.

LD for rat and marmot

| Rat |  |  | Marmot |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{LD}_{0}$ | $\mathrm{LD}_{50}$ | $\mathrm{LD}_{100}$ | $\mathrm{LD}_{0}$ | $\mathrm{LD}_{50}$ | $\mathrm{LD}_{100}$ |
| $315.2 \mathrm{mg} / \mathrm{kg}$ | $444.8 \mathrm{mg} / \mathrm{kg}$ | $628.8 \mathrm{mg} / \mathrm{kg}$ | $157.92 \mathrm{mg} / \mathrm{kg}$ | $200 \mathrm{mg} / \mathrm{kg}$ | $315.2 \mathrm{mg} / \mathrm{kg}$ |

5. Skin Irritation

ST520 is not irritated to the skin. But eye irritation is appeared when eyes are contacted with the concentrated from of it.

## APPLICATION ■

## 1. Medical Uses

Before surgical operation, sterilization hands, operation parts, and surgical instrument are sterilized with 0.02 solution of ST520.
(1) Dermatology

In case of dermatological disease caused by bacteria, $0.02 \sim 0.04 \%$ ST520 is recommendable to use two or three times daily with wet dressing.
(2) Urology
$0.4 \sim 0.01 \%$ solution of ST520 is recommendable to use for washing bladder and urinary canal.
(3) Others, Gynecology, Otolaryngology, Ophthalmology field.
2. Public Health

ST520 is very useful with its solution to sterilize dishes, fruits, vegetables, etc. In schools, hotels, theaters, dormitories, banks, etc., ST520 solution could be widely used.
3. Food Sanitary

For dairy products, canned foods, confectioneries, ST520 could be used for sterilization with applying $0.02 \sim 0.05 \%$ concentration. In restaurant, cooking utensils and tools could be sterilized.
4. Barber Shops and Beauty Parlors

The instrument and tools must be sterilizer by using ST520.
5. Home Laundry

Perspiration and urine are nutritious to bacteria. So underwear and swaddling clothes should be sterilized with ST520.

- PAKCING UNIT

200kgs PVC Drum

