Soaps, Detergents and Disinfectants Technology Handbook (3rd Revised Edition)

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Soaps, Detergents and Disinfectants Technology Handbook (3rd Revised Edition)
(Washing Soap, Laundry Soap, Handmade Soap, Detergent Soap, Liquid Soap, Hand Wash, Liquid
Detergent, Detergent Powder, Bar, Phenyl, Floor Cleaner, Toilet Cleaner, Mosquito Coils, Naphthalene
Balls, Air Freshener, Hand Sanitizer and Aerosols Insecticide)

Soaps are cleaning agents that are usually made by reacting alkali (e.g., sodium hydroxide) with naturally
occurring fat or fatty acids. A soap is a salt of a compound known as a fatty acid. A soap molecule consists of
a long hydrocarbon chain (composed of carbons and hydrogens) with a carboxylic acid group on one end
which is ionic bonded to a metalon, usually a sodium or potassium. The hydrocarbon end is nonpolar and is
soluble in nonpolar substances (such as fats and oils), and the ionic end (the salt of a carboxylic acid) is
soluble in water. Soap is made by combining tallow (or other hard animal fat) or vegetable or fish oil with an
alkaline solution. The two most important alkalis in use are caustic soda and caustic potash.
A detergent is an effective cleaning product because it contains one or more surfactants. Because of their
chemical makeup, the surfactants used in detergents can be engineered to perform well under a variety of
conditions. Such surfactants are less sensitive than soap to the hardness minerals in water and most will not
form a film.
Disinfectants are chemical agents applied to non-living objects in order to destroy bacteria, viruses, fungi,
mold or mildews living on the objects. Disinfectants are chemical substances used to destroy viruses and
microbes (germs), such as bacteria and fungi, as opposed to an antiseptic which can prevent the growth and
reproduction of various microorganisms, but does not destroy them. The ideal disinfectant would offer
complete sterilization, without harming other forms of life, be inexpensive, and non-corrosive.
The global soap and detergent market is expected to reach USD 207.56 billion by 2025. The industrial soaps
& detergents are extensively used by the commercial laundries, hotels, restaurants, and healthcare providers.
Increasing demand from healthcare and food industries will continue to drive the market. Aerosol and liquid
products are the common disinfectants used in hospitals, although growing number of healthcare facilities are
implementing ultraviolet disinfection systems as further measure. Increasing demand for disinfectants from
water treatment and healthcare industries is fuelling growth of the global disinfectants market.
The major contents of the book are Liquid Soaps and Hand Wash, Liquid Soap and Detergents, Washing
Soap: Laundry Soap Formulation, Antiseptic and Germicidal Liquid Soap, Manufacturing Process And
Formulations Of Various Soaps, Handmade Soap, Detergent Soap, Liquid Detergent, Detergent Powder,
Application and Formulae Of Detergents, Detergent Bar, Detergents Of Various Types, Formulating Liquid
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