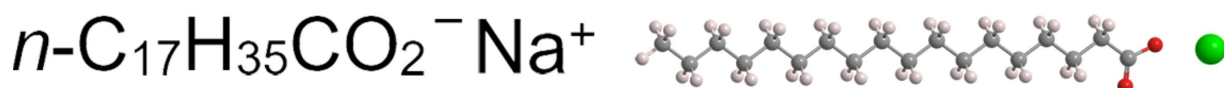


Sodium stearate



Humans began to use cleaning substances that resemble modern soaps almost five millennia ago. Early crude soaps were made from natural fats and oils and available alkaline materials such as wood ashes. During the Industrial Revolution, manufacturers began to make more refined soaps from purified fatty acids and alkalis such as lye (sodium or potassium hydroxide), quicklime (calcium oxide), or slaked lime (calcium hydroxide).

Sodium stearate is the most common fatty acid salt in today's soaps. Common sources of the starting material, stearic acid, are vegetable triglycerides obtained from coconut and palm oils and animal triglycerides from tallow. The names stearic and stearate are derived from *stéar*, the Greek word for tallow.

Besides being a major soap component, sodium stearate is used as an additive in other cosmetic products to form solid "stick" shapes. According to Acme-Hardesty, a Blue Bell, PA-based manufacturer of biobased products, sodium stearate has a wide range of additional uses, including

- emulsifier and dispersant in latex paints;
- ink thickener;
- stabilizer, viscosity enhancer, and dispersant for liquid makeups;
- FDA-approved flavor additive;
- viscosity modifier in gelled fragrances;
- lubricant in polycarbonates and nylons; and
- lubricant and de-dusting agent in rubber production.

Many Web sites provide recipes for making soap at home. But all scratch recipes require lye, which is better off being handled in the lab. If you are willing not to make soap from scratch, you can purchase a "melt and pour" soap, in which the desired oil or fat is already treated with lye.