

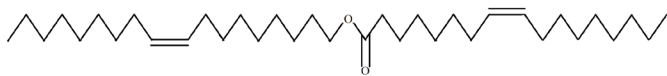


High Oleic Soybean Oil Soap

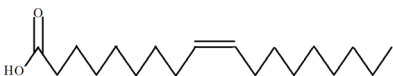
With the onset of COVID-19, Airable Research Lab is motivated to support our community during a time of uncertainty and stress. The importance of disinfection prompted our team to develop a liquid soap made from high oleic soybeans. The soybean oil leaves the hands feeling soft and moisturized, even after the repeated washings that are promoted as a safety measure against the virus.

THE TECHNOLOGY

High oleic soybean oil's emollient properties are derived from oleic acid, whose structure is very similar to the structure of the oils in our skin. The soybean oil is 60%-75% oleic acid, so cosmetic products that contain high levels of the oil are effective moisturizers.



Chemical Structure of Natural Skin Oil



Chemical Structure of Oleic Acid



Running reaction in soap production



High oleic soap (left) vs. soybean oil

THE BENEFITS

- **Performance:** High oleic soybean oil works well as a moisturizer, yet despite its name, the "oil" does not effect an oily look or feel.
- **Stability:** The crops commonly used for moisturizing oils are more environmentally demanding than soybeans, entailing supply chain interruptions in an era of increasingly unpredictable weather patterns. Soybeans provide a reliable and robust source.
- **Cost-Effectiveness:** The oils traditionally used to provide a moisturizing effect to soap and other cosmetics are quite expensive compared to soybean oil, a low-cost component.

Traditional Moisturizing Soap Oils	Price (per pound)
Apricot Kernel Oil	\$2.50
Argan Oil	\$12.50
Castor Oil	\$1.44
Cocoa Butter	\$4.47
Hazelnut Oil	\$5.46
Joboba Oil	\$9.16
Mango Butter	\$5.60
Neem Oil	\$5.84
High Oleic Soybean Oil	\$0.92

