

# High Oleic SOYBEANS



## What is a High Oleic Soybean?

A high oleic soybean has oil that contains at least **70 percent oleic acid**. Typically, soybean oil has 22-28 percent oleic acid. At high temperatures, the increased level of oleic acid makes the oil **more stable, and better for food uses like baking and frying**.

## Benefits of High Oleic Soybean Oil

### Health:

- High oleic soybean oil can be used at high temperatures in preparing foods **without hydrogenation** or producing harmful **trans fats**.
- High oleic soybean oil contains **less saturated fat** than other commonly used oils.



### Environment:

- High oleic soybean oil has an **extended fry-life**, lowering cost and waste.
- Soybean are a **renewable energy source**, and a **nitrogen-fixing** legume grown across Missouri.

Today, one bushel of soybean can be produced with 50 percent **less energy**, 50 percent **fewer emissions**, 40 percent **less water** and 35 percent **less land** than in 1980.

### Industry:

- High oleic soybean oil based motor oils have **better viscosity** and **lower volatility** than their synthetic counterparts, resulting in better performance in high temperature applications.
- Lubricants made with high oleic soybean oil offer **natural detergency**, leaving engines cleaner and reducing deposit on metal surfaces.



## Leading the Way

**Missouri leads the U.S.** in having the only high oleic soybean technology developed through **soybean breeding**.



The patents and applications for high oleic soybean are owned by the Curators of the University of Missouri and the U.S Dept.

of Agriculture; and are **exclusively licensed to the Missouri Soybean Merchandising Council**.

Development of high oleic soybean varieties is **currently being scaled through seed production** to be available to soybean farmers and licensing to other breeding programs.

## In the Marketplace

- High oleic soybean varieties produce oil with **increased functionality**, which has benefits for food and industrial uses.
- The United Soybean Board set a goal of planting 18 million acres of high oleic soybean by 2023 - increasing the profit per bushel by 66 cents. This would result in an additional **\$3.8 billion**.



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