# SOYLE C NON-GMO HIGH OLEIC SOYBEANS



#### WHAT IS A HIGH OLEIC SOYBEAN?

U.S. high oleic soybean has oil that typically contains 75 percent or greater oleic acid and less than 3 percent linolenic acid. Typically, soybean oil has a 23 percent oleic and 8 percent linolenic acid content. The improved fatty acid profile provides an oil with superior heat and oxidative stability for improved fry life and shelf life of prepared foods. High oleic soybeans have comparable oil and protein content to commodity soybeans, which produces a soybean meal with the same composition of protein and amino acids as commodity soybean, while providing competitive yields.

## BENEFITS OF HIGH OLEIC SOYBEAN OIL



#### HEALTH

· Lower saturated fat and three times the amount of beneficial monounsaturated fatty acids compared to conventional vegetable oils, which may contribute to lower blood pressure and improved cardiovascular health



#### SUSTAINABILITY |

- · High oleic soybean oil has an extended fry-life and self life, lowering cost and waste, and less packaging required for use
- Soybeans are a renewable energy source, and a nitrogenfixing legume



#### **FUNCTIONALITY**

- 2-3 times longer fry life and shelf life<sup>1</sup>, when compared to commodity soybean oil
- Less oil absorption, leading to cleaner, lighter flavor

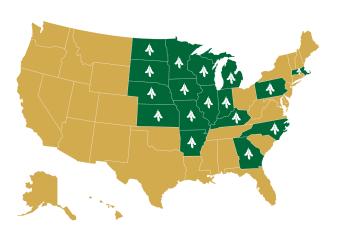
Soybeans account for 90% of the U.S. oilseed production. Over 90 million acres of soybean were planted in the US in 2017, and for the first time since 1983, 2018 acres surpassed corn acres planted in the US.<sup>2</sup>

## **LEADING THE WAY**

SOYLEIC®, a true non-GMO high oleic soybean trait, was developed through partnerships between the University of Missouri, the U.S. Department of Agriculture, Missouri Soybean Merchandising Council, and the United Soybean Board.

## **SOYBEAN MATURITY ZONES**

The relative maturity range of commercially available SOYLEIC® varieties allows for contract production across maturity groups 1-7 in the U.S. soybean-growing region.



# **CURRENT SOYLEIC® SOYBEAN ACRES FOR 2022**

Upcoming commercial varieties with University of IL, University of MN and University of MO in 2023

# TYPICAL FATTY ACID PROFILE, PROTEIN & OIL CONTENT<sup>3</sup>

	Oleic (Monounsaturated)	Linoleic (Polyunsaturated)	Linolenic (Polyunsaturated)	Saturates (Palmitic & Stearic)	Protein	Oil
SOYLEIC™	Greater than 75%	Less than 8%	Less than 3%	Less than 12%	36%	18%
Commodity Soy	24%	53%	8%	15%	34%	19%³

## 2022 SOYLEIC® COMMERCIALLY AVAILABLE VARIETIES

New 2023 graph coming soon!

Seed Company	Brand Name	Variety	Relative Maturity	Fatty Acid Composition		13% Moisture			Approx.	Approx.	
				Oleic	Linolenic	Saturates	Protein	Oil	Hilum	Seeds/lb.	Seeds/kg
Benson Hill™	eMERGE®	e12H902	1.2	78.3%	1.8%	10.8%	37.6%	19.1%	Yellow	3,200	7,040
Brushvale Seeds <sup>™</sup>	Brushvale Seeds <sup>™</sup>	BS1282	1.2	78.0%	1.7%	10.8%	36.5%	19.3%	Yellow	3,300	7,260
Benson Hill™	eMERGE®	e13H988	1.3	78.5%	1.8%	10.7%	37.3%	19.1%	Yellow	3,100	6,820
Benson Hill™	eMERGE®	e24H930	2.4	78.7%	1.8%	11.0%	36.3%	20.4%	Brown	3,052	6,714
University of Missouri	SOYLEIC®	SA17-2742 HOLL	2.8	79.2%	0.9%	11.9%	35.8%	18.0%	Buff	2,850	6,270
Benson Hill™	eMERGE®	e28H942	2.8	80.9%	1.8%	11.4%	35.0%	19.2%	Brown	3,339	7,346
Benson Hill™	eMERGE®	e34H608S	3.6	79.0%	2.3%	11.4%	37.0%	19.1%	Black	2,800	6,160
Benson Hill™	eMERGE®	e37H937S	3.7	79.7%	0.9%	11.2%	36.6%	18.1%	Black	2,800	6,160
Benson Hill™	eMERGE®	C37H051S	3.7	75.5%	2.4%	11.4%	37.1%	19.6%	Black	2,751	6,052
Benson Hill™	eMERGE®	C38H052S	3.8	78.4%	2.0%	10.8%	37.8%	18.9%	Black	2,619	5,762
University of Missouri	SOYLEIC®	SA17-8882 HOLL	4.0	79.9%	2.3%	11.2%	35.5%	17.1%	Black	2,920	6,424
Benson Hill™	eMERGE®	C44H054S	4.4	77.9%	1.9%	10.6%	37.5%	20.1%	Black	2,578	5,672
Benson Hill™	eMERGE®	e45H907	4.5	79.4%	0.8%	10.8%	35.4%	18.8%	Black	2,700	5,940
Benson Hill™	eMERGE®	e46H616	4.7	79.0%	2.3%	11.4%	37.8%	18.0%	Black	2,700	5,940
University of Missouri	SOYLEIC®	S15-17812 HOL	4.8	84.2%	2.9%	10.2%	36.5%	19.0%	Buff	3,700	8,140
Benson Hill™	eMERGE®	e51H969S	5.2	82.5%	0.8%	9.7%	36.9%	18.5%	Black	2,700	5,940
University of Georgia	SOYLEIC®	G15PR-340	6.0	79.3%	2.6%	_	36.1%	20.2%	Buff	3,410	7,500
University of Georgia	SOYLEIC®	G17PR- 1207HOLL	7.0	78.7%	1.9%	_	37.7%	19.3%	Black	2,800	6,250
University of Georgia	SOYLEIC®	G17PR- 1053HOLLR1	7.0	79.0%	2.7%	_	34.6%	18.0%	Black	3,200	7,100

#### **SOURCES**

- 1. U.S. High Oleic Soybeans & High Oleic Soybean Oil Sourcing Guide for International Customers, Second Edition September 2021.
- 2. <u>U.S. Department of Agriculture, Oil Crops Sector at a Glance. July 2022.</u>
- 3. U.S. 2010-2019 Average, Source: Quality of the U.S. Soybean Crop: 2020, Univ. of MN





Visit **SOYLEIC.com** for more information, or to request an oil sample.