



**Better, right from the start.™**

**Trans Fat Solution with Functional Benefits and Solid Yields**

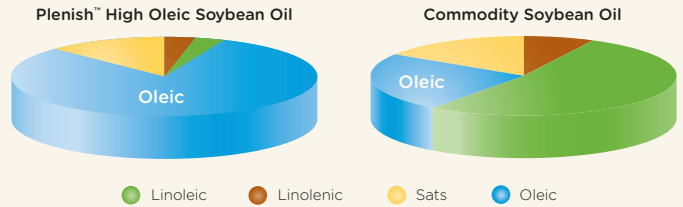


Plenish™ high oleic soybean oil offers functional and consumer benefits with improved performance and broader applications than other available oils to help meet the food industry's need for a soy-based trans fat solution.

**PLENISH™ HIGH OLEIC SOYBEAN OIL**

- Oleic content of more than 75%, similar to olive oil
- 20% less saturated fat than commodity soy oil and 75% less than palm oil
- Linolenic content of <3% (versus 7% for commodity soy oil) for greater oil stability

**SOYBEAN OIL PROFILE**

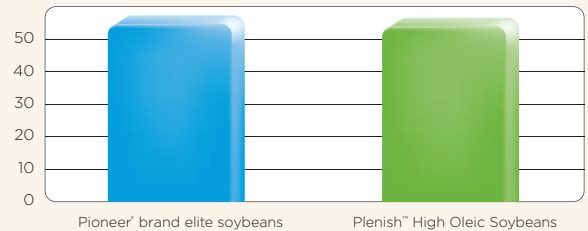


**MEETING THE DEMAND FOR ENHANCED SOY WITH HIGH-PERFORMING PIONEER® BRAND Y SERIES GENETICS**

Plenish™ high oleic soybean varieties are developed using Pioneer's exclusive Accelerated Yield Technology (AYT™) system, with bred-in pest resistance traits and a strong agronomic package.

- Pioneer is integrating the Plenish™ high oleic soybean trait into elite Pioneer® brand Y Series genetics with diverse maturities and agronomic packages, suitable for a wide range of geographies
- SCN and Phytophthora resistance, SDS tolerance included

**PLENISH™ HIGH OLEIC SOYBEAN YIELD COMPARISON**



\* Source: Pioneer research plot multi-year yield data depicting an average yield on Plenish™ high oleic commercial varieties compared to average yield of Pioneer® brand elite soybean checks in 2008-2010.

**IMPROVED PROFILE & SUPERIOR STABILITY**

- Provides superior blending opportunities to optimize functionality, cost and flavor
- Stable fatty acid profile with minimal fluctuation during atypical years of extreme environmental stress (e.g. cold, wet)
- Oxidative Stability Index (OSI 110°C) greater than 25 hours
- Increased fry life, 2-3X longer than conventional soybean oil
- Extended product shelf life in spray oil applications, baked goods and snacks
- Increased heat stability reduces polymer build-up on frying and manufacturing equipment resulting in lower maintenance and cleaning costs along with improved employee safety and work environments

**BIO-BASED INDUSTRIAL APPLICATIONS**

- Vegetable oils have several advantages to petroleum-based oils including lubricity, lower volatility and a high flash point. However, they suffer from a lack of oxidative stability that can prevent their use in certain high temperature environments. High oleic soybean oil has exceptional heat and oxidative stability and can be used in high temperature and extended use applications where conventional soybean oil is not an option.
- Applications may include:
  - Lubricant formulations
  - Dielectric fluids
  - Polyols, plastics, foams, adhesives
  - Source of oleic acid for oleochemical production

**For more information visit [www.plenish.com](http://www.plenish.com)**

• Plenish™ high oleic soybeans and oil offer functional and end-user benefits. No nutritional or health claims are expressed or implied.

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