HIGH STABILITY OILS: THE PROVEN SOLUTION FOR TODAY'S FOOD INDUSTRY

VALUE-ADDED INGREDIENTS

Taste
The clean, light taste of high stability oils performs at or above leading competitive frying oils in consumer tests.

Traceable
High oleic seeds from Corteva Agriscience are grown under an identity preservation (IP) program that preserves the quality of the crop and its oil.

These high stability oils can be followed from the region where farmers grow the crops to the facilities where harvested seeds become oil. This increases the level of transparency for consumers, and may allow for the inclusion of quantitative sustainability and production date in select scenarios.

Clean Labels
The stability of the oils allows packaged foods to stay fresh without additives or artificial preservatives enabling the clean labels consumers demand.

Health
High stability oils support Dietary Guidelines for Americans, Canadian Food Guide and WHO directives for levels of monounsaturated fat in the diet.

The Food and Drug Administration (FDA) has approved a qualified health claim for high oleic oils. The claim states supportive, but not conclusive, scientific evidence suggests that daily consumption of about 1 ½ tablespoons (20 grams) of oils containing high levels of oleic acid may reduce the risk of coronary heart disease. These oils should replace fats and oils higher in saturated fat and should not increase the total number of calories you eat in a day.

FOR MORE INFORMATION, VISIT VALUEADDEDINGREDIENTS.COM

CORTEVA™ agriscience

'American Heart Association. https://wwwheart.org/ en/ news/2018/05/01/advisory-replacing-saturated-fat-with-healtier-fat-could-lower-cardiovascular-risks

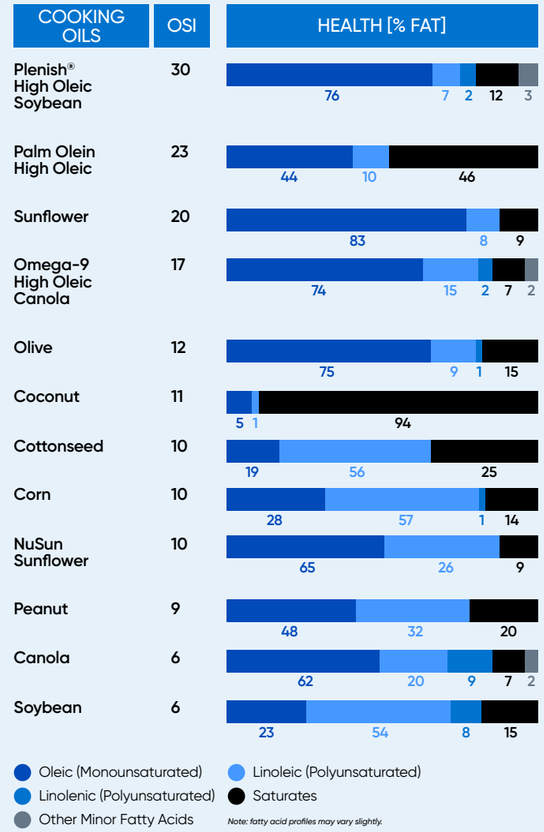
For more than 25 years, Corteva Agriscience has embraced seed breeding innovation to enable Value-Added Ingredients to meet the operational needs of the food industry, and the taste and nutrition benefits consumers demand without sacrificing performance.

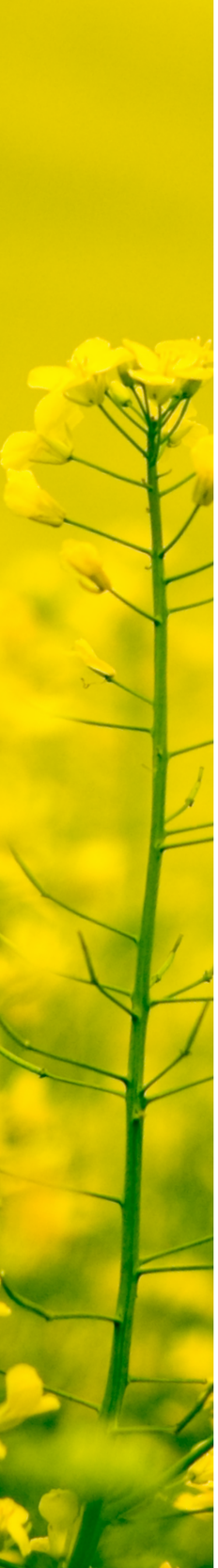
The Value-Added Ingredients portfolio includes Omega-9 Canola Oil and Plenish® high oleic soybean oil, produced from Corteva Agriscience™ high oleic oilseeds.

These high stability oils are naturally stable, traceable and offer health benefits that do not compromise oil performance or food taste.

Performance
The unique fatty acid profile of high stability oils offers exceptional functionality and delivers numerous performance benefits, making them a cost-effective solution.

Versatile
The oils can be used for a variety of applications, including frying, par-frying, sprays, salad dressings, reduced saturated fat shortening, non-dairy creamers, margarines and spreads.





Omega-9 Oils

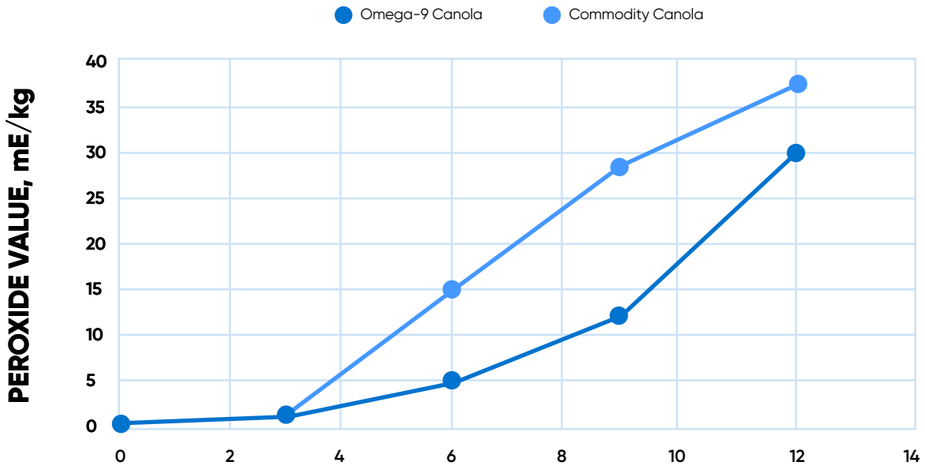
Healthier Oils. Healthier Business.™

Omega-9 Canola Oil is a naturally stable, healthy cooking oil that is readily available for the foodservice and food processing industries. High oleic canola oil helps maintain the freshness of food products, without additives or preservatives, and can extend fry life over commodity oils.

Omega-9 Canola Oil was developed to enhance the healthfulness of foods while preserving key functional qualities such as clean taste, extended product shelf life and overall cost effectiveness.

High oleic canola oil contains no trans fat, is among the lowest in saturated fat and is high in heart-healthy monounsaturated fats.

Schaal Oven Test



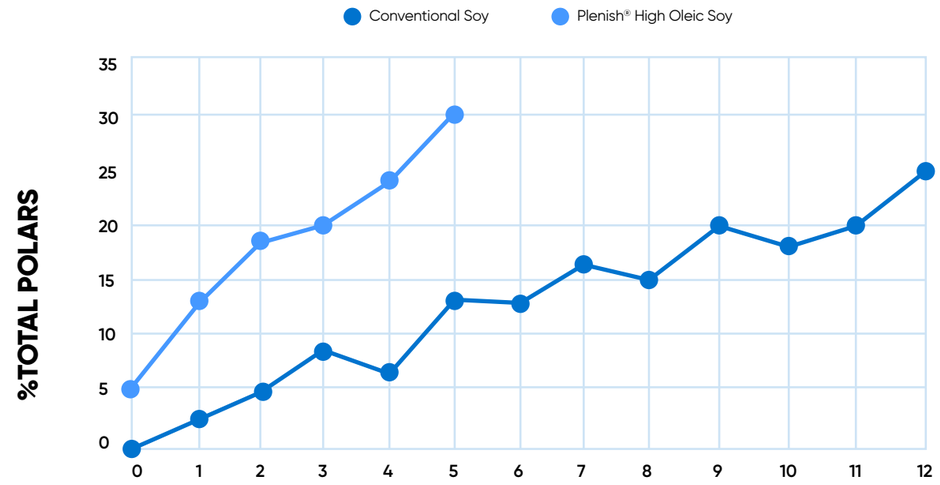
Comparison of peroxide values for Omega-9 Canola Oil versus commodity canola oil over time. The slower development of peroxides in the Omega-9 Canola Oil indicates that it can be used to achieve a longer shelf life in manufactured food products compared to commodity canola oil.

plenish

High Oleic Soy

Plenish® high oleic soybean oil offers functional and nutritional benefits for both foodservice and food processing. The combination of a high monounsaturated and low polyunsaturated oil results in exceptional heat and oxidative stability which extends shelf life and provides longer fry life for food manufacturers.

Fry Life Analysis

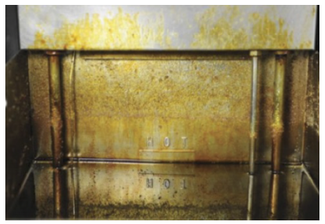


Plenish® high oleic soybean oil provides an opportunity for foodservice operators to extend use of their frying oil without sacrificing taste or performance. Results have shown that Plenish® high oleic soybean oil extends fry life 2-3x over conventional soybean oil in industry testing.

Performance

Over time, less stable oils deposit polymers on equipment (e.g. foodservice, spray nozzles) causing maintenance, cleaning issues and inefficiencies. The increased heat stability of high oleic soybean oil reduces polymer buildup, leading to cleaner equipment and less labor used for cleaning.

Commodity Soybean Oil



Plenish® High Oleic Soybean Oil

Fryers were used to prepare french fries over 13 days at 176° C, 8 hours per day.