

with Tate & Lyle



Snacks

Our starches can influence dough texture as well as improve machinability, mouthfeel and appearance of finished products.

FUNCTIONALITY	TATE & LYLE STARCH SOLUTION				BENEFITS
	Cook-Up		Instant		
Crispy and crunchy texture			MERIGEL® 300, 301* STA-SLIM® 150	X-PAND'R® X-PAND'R® SC* X-PAND'R® 612* X-PAND'R® 305NG	Release of moisture during baking or frying. Provides moderate to high expansion. e.g. Sheeted crackers, baked snacks
Dough stickiness reduction			CLARIA TOP-GEL®* MERIGEL® 300, 301* MIRA-GEL® 100, 463* STA-SLIM® 142	X-PAND'R® X-PAND'R® SC* X-PAND'R® 612* X-PAND'R® 305NG	Retention of viscosity under heat and shear. Compatible with cold/low temperature extrusion. e.g. Extruded snacks and crisps
Dough binding and machinability			MERIGEL® 300, 301* STA-SLIM® 150	X-PAND'R® X-PAND'R® SC* X-PAND'R® 612* X-PAND'R® 305NG	Aids with dough formation and improves machinability. e.g. Sheeted snacks
Fat reduction in fried snacks	MAXI-GEL® 7776 MERIZET® 300*	MIRA-CLEER® 516 TAPIOCA No. 1* Waxy #1*			Helps with sheeting and reduces fat absorption in fried snacks. e.g. Fried potato crisps, fried tortilla chips
Crispy texture in reduced- fat formula			CLARIA TOP-GEL®*	MIRA-GEL® 100, 463* X-PAND'R® SC** X-PAND'R® 305NG	Aids in development of desired texture during baking. e.g. Baked snacks
Increase in expansion	MERIZET® 100, 300* Pure Food Powder*	TAPIOCA No. 1* Waxy #1*	CLARIA TOP-GEL®* MIRA-GEL® 100, 463*	STA-SLIM® 142 STA-SLIM® 150	Provides uniform cell structure and increases expansion. e.g. Extruded snacks
Adhesion of seasonings and particulates			TAPIOCA Dextrin 11, 12		High degree of tackiness, low viscosity solution and quick drying. e.g. Bak snacks with particulate toppings such as seasonings or seeds
Sugar reduction in bars	TAPIOCA No. 1*		STA-SLIM® 150 X-PAND'R® 612** X-PAND'R® 305NG		Starches in conjunction with bulk sugar replacers help to form a pliable an stable binding system with reduced sugar content and no polyols. e.g. Reduced sugar bars

Starch source: CORN (MAIZE) | TAPIOCA | POTATO

*Labels simply as corn, tapioca or potato starch



Viscosity Development

The right viscosity at the right time in your formulation process can make all the difference in snack appeal. Whether you use heat processing or low-temperature processing to create your snack foods, Tate & Lyle has the texturant to help you succeed.

Texture Development

With snack foods, one texture does not fit all, which is why we offer a full range of texturants to enable you to achieve the snack experience your customers crave.

- Increase expansion—Create or control the texture and expansion of cereals and extruded snacks with the right starch selection.
- **Crispy, crunchy texture**—Produce the perfect texture for your snack food, from a light and airy crisp to a hard and crunchy snap, and anywhere in between.
- **Crunchy coatings**—Pre-gel starches provide a light and crunchy coating with excellent adhesion to fruits and nuts for adding an extra layer of texture.

Finished Product Stabilization

With starches, you can create snacks that not only taste good but also keep their texture and structure throughout their shelf life.

Health and Wellness

Meet the growing demand for gluten-free, low-fat, low-sodium and low sugar snacks that are tastier. Starches can optimize structure and texture in the most challenging formulations.

Process Functionality

From cutting costs to creating healthier foods, starches can help you meet demand and improve your bottom line.

- Dough binding and machinability—Starches provide the dough cohesion needed for sheeting, imparting pliability and moderate elasticity to the dough sheet without ripping or tearing, giving you higher yields, increased cost saving and greater peace of mind.
- Fat reduction—Starches can help reduce fat absorption in fried snacks or optimize moving from a traditional frying to oven-baked process—without affecting taste or texture.

Clean Label

Enjoy a clean-label claim and great taste, too, with CLARIA® Functional Clean-Label Starches, which label simply as "starch", "corn starch" or "tapioca starch"** yet perform similarly to modified food starches. The CLARIA® line offers a clean, neutral taste and colour comparable to modified food starches and is versatile across a broad range of applications and sophisticated processes.

About Tate & Lyle

We are a leading global food and beverage ingredients and solutions supplier, with a 160-year history of ingredient innovation. Through our purpose, *Transforming Lives Through the Science of Food*, we believe that together, we can successfully grow our businesses whilst having a positive impact on society. Partner with us to create healthier, tastier and more sustainable food and beverage solutions for consumers.

The information contained should not be construed as recommending the use of Tate & Lyle's product in violation of any patent, or as warranties (expressed or implied) of non-infringement or its fitness for any particular purpose. Prospective purchasers are advised to conduct their own tests, studies and review of the intellectual property and regulatory space to determine the fitness of Tate & Lyle products for their particular purposes, product claims or specific applications.

^{**&}quot;Starch" or "maize starch" in Europe: "starch" or "corn starch" in the US, Canada, China, Australia, New Zealand and Latin America.

