CLARIA® DELIVERS ON BOTH TASTE AND PERFORMANCE.

Market opportunity

Globally, consumers are demanding convenient, greattasting foods that have recognisable ingredients on the label.¹ In fact, one in four new products today is launched with 'cleaner-label' claims.²

Clean-label ingredients

To formulate a cleaner-label product, manufacturers often need to replace traditional, highly functional ingredients used for specific purposes such as thickening. This approach can affect shelf life, flavour, appearance, texture and other key characteristics, so finding a cleanlabel alternative that performs well is crucial. That's where CLARIA® Functional Clean-Label Starches come in.

CLARIA® benefits

CLARIA® Functional Clean-Label Starches label simply as 'starch'* and:

- Are non-GMO
- Are comparable to food starches and other functional clean-label starches in terms of process tolerance
- Offer clean taste and colour comparable to food starches
- Use CLARIA® technology, a proprietary technology that has been shown to provide improved sensory attributes (colour) vs. other functional clean-label starches

³lbid

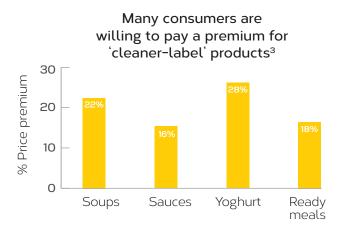
CLARIA® Functional Clean-Label Starches match food starches in terms of process tolerance and offer comparable colour.



Native starch

CLARIA®

Other functional native starches



TATE & LYLE

Introducing CLARIA® Bliss

New functional clean-label starches made from tapioca.

CLARIA® Bliss attributes

- Delivers a whiter colour, cleaner flavour than other functional clean-label tapioca starches
- Provides high performance similar to a modified tapioca starch
- GMO-free and labels simply as 'tapioca starch'
- Is versatile across a wide variety of applications and sophisticated processes

CLARIA® Bliss applications

Waxy, corn-based CLARIA[®] clean-label starches and new CLARIA[®] Bliss clean-label tapioca starches have been tailored for use across a wide range of foodproduct categories and processing conditions.

Custards	Creamy sauces	
Puddings	Soups	
Indulgent dairy desserts	Toddler meals	
Bakery fillings)	

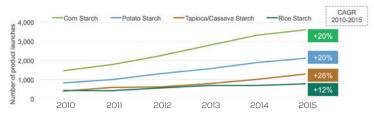
- CLARIA[®] Bliss 560, like CLARIA[®] Essential, is preferred for moderate heat and shear processes such as retorting, or for batch cooking conditions that impart high temperature for an extended time.
- CLARIA[®] Bliss 570, like CLARIA[®] Plus, is suitable for processes imparting high temperature and shear for a short time (HTST), as in the pasteurisation of fruit fillings and dairy desserts.

 CLARIA[®] Bliss 580, like CLARIA[®] Elite, builds optimum viscosity under conditions of high shear and low pH. It is suitable for ultra-high-temperature (UHT) processes such as production of yoghurt-like desserts.

Product	Process tolerance	Viscosity of dairy dessert Brookfield, cps
CLARIA® Bliss 580	very high	7800
CLARIA [®] Bliss 570	high	7130
Other functional clean-label starches	med-high	4810

Other functional clean-label starches must often be used at higher usage levels to achieve the same viscosities.

Development of global clean-label product launches – by starch type



Sample availability

Samples of each of the six CLARIA® Functional Clean-Label Starches are available in 1-liter containers. The product is sold in a standard commercial pack size of 25-kilogram bags. All six CLARIA® starches are non-GMO and have regular versions available.

CLARIA®

Tapioca-Based Starches CLARIA® Bliss 560 CLARIA® Bliss 570 CLARIA® Bliss 580

CLARIA®

Corn-Based Starches

CLARIA® Essential CLARIA® Plus CLARIA® Elite

Contact us: Email **solutions.tateandlyle@tateandlyle.com** to request a sample and see how CLARIA® can support your cleaner-label product launch.

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