

## STARCH CORE PORTFOLIO



## Taste & Texture on Target

Today's consumer seeks food experiences that meet taste and texture expectations—whether luxuriously smooth or addictively crunchy. With ADM, we jump start your formulations with clean tasting starch solutions that improve texture and tenderness. We satisfy growing consumer demand for Non-GMO, gluten-free and clean label offerings, as well. ADM has solved your most challenging taste and texture formulation issues with starches that also deliver on-trend appeal.

#### GIVING YOU AN EDGE WITH DELICIOUS FUNCTIONALITY & VERSATILITY

Food starch ingredients and expertise from ADM make all the difference. ADM starches are flavor-neutral and designed to improve texture and tenderness in a variety of foods. The three major types of starches are Native (unmodified), Modified and Functional Native. Native and functional native starches are growing faster than modified.<sup>1</sup>

**5.5%** CAGR of new product launches using tapioca starch 2015-2026<sup>2</sup>

<sup>1</sup>Euromonitor <sup>2</sup>MarketWatch, May 2020



# More Applications, More Benefits

Our lines of native, modified and pre-gelatinized starches function as thickeners, extenders, emulsion stabilizers and ingredient carriers. Not only do we provide superior food starch ingredients to help your food business succeed, we add the experience, insights and resources that give you an edge.



#### **Bakery & Frozen Baked Goods**

- Carbohydrate-based fat replacement
- Provide bulk and impact volume
- Boost quality and performance
- Solutions for gluten-free breads and baked goods



#### Snacks

- Create a shiny, crisp surface
- Perfect seasoning carrier
- For better pretzels, chips, popcorn, extruded snacks and other sweet/savory snacks

#### **Dairy & Frozen Desserts**

- Control melting character
- Increase freezing temperature
- Prevent syneresis
- Provide a smooth texture and mouthfeel
- Replacement of protein and fat solids
- Clean flavor

#### Sauces, Dressings & Condiments

- Provide texture and mouthfeel
- Prevent syneresis
- Ideal sheen while proving adhesion and perfect cling



#### Beverages

- Improve mouthfeel
- Superior flavor carrier
- Increase foam retention
- Used in beers, sports drinks and more

#### Confectionery

- Provide humectancy and adhesion
- Inhibit sugar crystallization
- Extend shelf life
- For better hard and soft candies

SNAPSHOT OF OTHER APPLICATIONS WHERE STARCHES PLAY A ROLE:

SWEET BISCUITS

PROCESSED MEAT, POULTRY & SEAFOOD

**READY MEALS** 

SOUPS

PROCESSED VEGETABLES



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## The Right Products

ADM offers a variety of custom blended oils to meet your application requirements and fulfill consumer desires for foods with great taste and texture.

#### TEXPERIEN™ TAPIOCA STARCHES & MALTODEXTRINS

Tapioca starches from ADM deliver great taste and texture that's also on trend—and satisfies consumer demand for clean label offerings. Non-GMO and gluten-free, our tapioca starches offer all the functionality to deliver superior texture, plus a clean, neutral flavor profile for the ultimate consumer-pleasing taste in your products. Our tapioca maltodextrins also include organic options.

Category	Product Series	Туре	Key Performance Attributes		
TEXPERIEN™ TRUE - NATIVE & FUNCTIONAL NATIVE TAPIOCA STARCHES & FLOURS					
Texperien™ Native Tapioca Starch	2618 Series 2698 Series	C/U, O P, O	Thickening and stabilization with clean, neutral flavor.		
Texperien™ Tapioca Starch	2601 Series 2698 Series	C/U P, O	Functional native starches for developing texture and providing process stability across a broad range of applications, with simple clean label statements that are on-trend and appeal to consumers.		
Texperien™ Tapioca Flour	3601 Series 3698 Series	C/U P	Functional tapioca flours that offer the performance of starch with the label friendly appeal of flour. Tapioca flours can provide viscosity, help prevent syneresis and improve freeze-thaw stability of a variety of applications.		
TEXPERIEN™ MAX - MODIFIED TAPIOCA STARCHES, MALTODEXTRINS & SYRUP SOLIDS					
Texperien™ Modified Tapioca Starch	2650 Series 2604 Series	C/U P	Provides a smooth, short texture and excellent syneresis protection, especially in low pH foods. Ideal for use in sauces, fruit fillings and cream fillings.		
Texperien™ Modified Tapioca Starch	2651 Series	C/U	Excellent thickening properties, great clarity and freeze-thaw stability. Widely used to provide texture and improve stability of sauces and frozen noodles.		
Texperien™ Modified Tapioca Starch	2660 Series 2600 Series	C/U P	Low pasting temperature, with excellent heat, shear and acid resistance. Used in a broad range of applications, from sauces, soups and dressings to baked goods.		
Texperien™ Modified Tapioca Starch	2662 Series	C/U	High process tolerance with robust stability to heat, shear and pH. Provides viscosity and syneresis protection. Good freeze-thaw stability in low temperature storage. Used in fruit fillings, sweet and savory frozen pies, and frozen sauces and gravies.		
Texperien™ Modified Tapioca Starch	2653 Series 2654 Series 2694 Series	C/U C/U P	Low viscosity profile, oil retention and film forming properties. Ideal for use in emulsification, spray drying and encapsulation.		
Texperien™ Modified Tapioca Starch	2655 Series 2605 Series	C/U P	Highly stable in a wide pH range with exceptional shine and textural properties. Excellent freeze-thaw stability. Typically used in syrups, sauces, snacks, and baked goods.		
Texperien™ Modified Tapioca Starch	2656 Series 2606 Series	C/U P	Robust process stability and outstanding freeze-thaw resistance for superior performance in frozen foods. Smooth, creamy texture with a glossy appearance. Designed for use aseptic, retort and high temperature/shear processing conditions. Ideal for dairy, canned products, pie fillings, and sauces used in frozen applications.		
Texperien™ Modified Tapioca Starch	2620 Series	C/U	Low viscosity. Can be cooked to low moisture content without becoming viscous. Useful in confectionery.		
Texperien™ Tapioca Dextrin	2645 Series	C/U	Low viscosity, high solubility, good clarity and sheen. Film forming and adhesion properties. Contributes to body and mouthfeel. Suitable for use in dry mixes, batters and breadings, confections, and as a glaze in bakery items.		
Texperien™ Tapioca Maltodextrin and Syrup Solids	2675 Series 2670 Series	0	Versatile ingredients that can be used in a broad range of applications. They provide body and mouthfeel with a slight sweetness. Ideal for use in dry mixes, ice creams or as a carrier and bulking agent. Available in 10DE, 15DE, 18DE, and 24DE.		
TEXPERIEN™ EDGE - ADVANCED TEXTURIZING & NUTRITIONAL SOLUTIONS					

Texperien™ Resistant Tapioca Starch	2674 Series	90% dietary fiber. Ideal for use in high fiber & low carb formulations, including baked goods, pasta and snacks.
		$C/II = Cook_{-III}$ $P = Pregel O = Organic$

C/U = Cook-up P = Pregel O = Organic



#### ADM WHEAT STARCHES

ADM Wheat Starches are non-GMO and perfect for use in a variety of applications. When it comes to delivering the texture and appearance consumers seek, our wheat starches have a white color that is ideal for surimi and baked goods. And our pregel starches make formulation easy across many finished products.

Туре	Product Name	Key Performance Aspects	Typical Applications
Native Wheat Starch	Whetstar <sup>®</sup> 4	Cost effective, clean label, provides thickening and body, white color	Surimi, baking (i.e. angel food cake, tortillas and cookies), icing; dry mixes
Pregel Wheat Starch	Paygel <sup>®</sup> 290	Cold water soluble, high viscosity, no cooking required, batter viscosity control	Fillings, oil barrier in breading, sauces, snacks, and pet food

#### ADM CORN STARCHES

ADM Corn Food Starches for food applications are cost effective options to develop texture and provide stability. Available in bulk containers and 50lbs bags.

Product Name	Raw Material	Key Specifications
ADM 100 Non-GMO Native Food Starch	Non-GMO Dent Corn	9-13% moisture, pH 5-6.5
ADM 115 Non-GMO Native Food Starch	Non-GMO Dent Corn	9-10.3% moisture, pH 5-6.5
ADM 184 Native Food Starch	Dent Corn	9-10.3% moisture, pH 5-6.5
ADM 185 Native Food Starch	Dent Corn	9-13% moisture, pH 5-6.5

#### ADM MOULDING STARCHES

ADM Moulding Starches have excellent flow properties and are easy to sift and handle, allowing confectionery manufacturers to build high quality beautiful moulds.

Product Name	Raw Material	Key Specifications
ADM 305 Moulding Starch	Dent Corn	+0.05% Mineral Oil
ADM 307 Moulding Starch	Dent Corn	+0.75% Mineral Oil
ADM 310 Moulding Starch	Dent Corn	+0.10% Mineral Oil
ADM 325 Non-GMO Moulding Starch	Non-GMO Dent Corn	+0.05% High Stability Sunflower Oil
ADM 327 Non-GMO Moulding Starch	Non-GMO Dent Corn	+0.75% High Stability Sunflower Oil
ADM 330 Non-GMO Moulding Starch	Non-GMO Dent Corn	+0.10% High Stability Sunflower Oil

# FULFILLING GREAT EXPECTATIONS WITH GREAT FORMULATIONS

With in-house R&D and application capabilities, plus a reliable supply chain and world-class production facilities, we are ready to help you succeed and get to market faster.

- Broad portfolio
- Robust supply chain and proven network
- R&D and applications expertise
- Speed to market

### ADM DELIVERS FOR YOU

ADM is one of the world's largest agricultural processors and food ingredient providers with a global value chain that connects you to success. What's that mean for you? With our vertically integrated business model, state-of-the-art facilities, industry-leading quality standards, unparalleled infrastructure, and the world's premier crop transportation network, you can trust us to deliver what you need when you need it.

