

## 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
- Beneficial 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





## **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.

### ADM 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.

Product	Product code	Key Performance Aspects	Typical Applications
ADM Native Tapioca Starch	261850	Cost effective, clean label, neutral flavor, thickening and stabilizing Bakery, blends and pet food	
ADM Modified Tapioca Starch	2650xx	Excellent resistance to high heat, mechanical shear, and low pH applications	Fruit based sauces and fillings, bakery, cream fillings, and dairy
ADM Modified Tapioca Starch	2651xx	Improved low temperature stability and water holding capacity. Texturing agents	Processed meats and seafood, processed cheese and cheese analog, and noodles
ADM Modified Tapioca Starch	2660xx	Improved low temperature stability, excellent resistance to high heat, mechanical shear and low pH	Sauces and dressings, fruit pie fillings, baked goods, and frozen foods
ADM Modified Tapioca Starch	2662xx	Improved low temperature stability, excellent resistance to high heat, mechanical shear and low pH	Sauces and dressings, fruit pie fillings, baked goods, and frozen foods
ADM Modified Tapioca Starch	2654xx	Good emulsion stability, with hydrophobic characteristics	Beverages, analog cheeses, spray drying and encapsulation
Resistant Tapioca Starch	267490	High content of dietary fiber. Superior stability through process with low water holding capacity for enhanced crispiness and ease Bakery, snacks, bars, noodles and pasta formulating at higher inclusion levels	
ADM Organic Tapioca Maltodextrin & Syrup Solids	267510 267515 267524	Non-GMO, same functionality as standard maltodextrin, extremely bland flavor compared to corn based maltodextrin	Baking, snacks, beverages, binder, carrier, confections, dairy, dry mixes, fat reduction, frozen desserts, meats, salad, dressings, sauces, spray drying aid

### 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	Aytex® P Whetstar® 4 Whetstar® 3 (low moisture)	Cost effective, clean label, provides thickening and body, white color	Surimi, baking (i.e. angel food cake, tortillas and cookies), icing; dry mixes and anti-caking agent for Whetstar 3
Pregel Wheat Starch	Paygel® 290 Paygel® 300	Cold water soluble, high viscosity, no cooking required, batter viscosity control	Fillings, oil barrier in breading, sauces, snacks, and pet food
Modified Wheat Starch	Jeltec™ 3 Jeltec™ 8	Cooks at a lower temperature than native starch, less gel-like properties when cooled, less cloudy appearance, added freeze-thaw stability	Noodles, meats and microwavable muffins



### 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 molds.

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.

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