



HOME



CARGILL
ADVANTAGE



CUSTOM
SOLUTIONS



LABEL
FRIENDLY



AGILE
RESPONSE



APPLICATIONS

CUSTOM TEXTURIZING SYSTEMS

Customized formulation
solutions for food and
beverage manufacturers.
Backed by technical
industry experts.



BEGIN ►



HOME



CARGILL
ADVANTAGE



CUSTOM
SOLUTIONS



LABEL
FRIENDLY



AGILE
RESPONSE



APPLICATIONS

Cargill Advantage

As a customer-focused supplier of ingredients for the food, beverage, dietary supplement and pharma/personal care industries, Cargill is uniquely positioned to help customers develop exciting new solutions for its customers and consumers.

Cargill's Custom Texturizing Systems deliver innovative solutions to address formulation challenges, and ingredient replacements that enable a label-friendly product. We deliver high-quality solutions supported by our top-notch technical team of experts, while also helping customers manage risk and control costs.

Cargill's reliable supply chain includes quality ingredients sourced from our extensive portfolio. And if we don't have an ingredient in our current portfolio, Cargill has the global resources and buying power to source products efficiently and cost-effectively.

Sourcing multiple ingredients can involve contacting several suppliers, dealing with quality and regulatory requirements, and resolving supply chain and production issues. Using Cargill's Texturizing Systems helps customers manage risk and save precious time.



Proven, trusted and experienced business partner.

Cargill's experienced technical experts are proven customized solutions providers.



Broad portfolio, global resources and buying power.

Cargill offers a wide variety of label-friendly ingredient replacements which equal or improve product performance.



Reliable and sustainable supply chain.

Cargill's reliable supply and superior customer service minimize risk.



HOME



CARGILL
ADVANTAGE



CUSTOM
SOLUTIONS



LABEL
FRIENDLY



AGILE
RESPONSE



APPLICATIONS

Custom Solutions

Simplify your business processes. Cargill's Custom Texturizing Systems are worry-free, tailor-made, optimized product formulation solutions for food and beverage manufacturers. Cargill's custom ingredient solutions solve formulation challenges and/or replace ingredients to produce a label-friendly product. These high-quality innovative solutions help manage risk and control costs.

Cargill provides Texturizing System solutions in a broad range of application categories from dairy, bakery and fruit prep to beverages, confectionery and convenience foods.



Custom Texturizing Systems give Cargill's customers access to a broad portfolio of ingredients including starches, hydrocolloids, emulsifiers, standardizing agents, sweeteners, fibers, vitamins and minerals.

Whether you need a quick solution to control phase stability during storage, help creating more creaminess in your dairy product or improved glaze stability to increase shelf life, our team of experts is here to help.



OVERVIEW



CUSTOMIZED



EASY-TO-USE, CONVENIENT
AND COST EFFECTIVE



SMART, RELIABLE AND
QUALITY-ASSURED



HOME



CARGILL
ADVANTAGE



CUSTOM
SOLUTIONS



LABEL
FRIENDLY



AGILE
RESPONSE



APPLICATIONS

CUSTOM SOLUTIONS

Customized

Cargill's Texturizing Systems are tailor-made, from formulation to packaging specs, to ensure ease of use. Whether you need extra protein in your Greek yogurt or reduced sugar in your kosher ice cream, Cargill's quality experts will simplify your processes by providing an easy, drop-in solution.



OVERVIEW



CUSTOMIZED



EASY-TO-USE, CONVENIENT
AND COST EFFECTIVE



SMART, RELIABLE AND
QUALITY-ASSURED



HOME



CARGILL
ADVANTAGE



CUSTOM
SOLUTIONS



LABEL
FRIENDLY



AGILE
RESPONSE



APPLICATIONS

CUSTOM SOLUTIONS

Easy to Use, Convenient and Cost Effective

Cargill's broad portfolio of ingredients, coupled with the global buying power to source any non-core ingredients, helps customers save both time and money.

- You don't have to worry about fluctuating costs and availability of individual ingredients. When you work with Cargill, you can save money by locking in one price for a tailor-made system formulation from a reliable, consistent supply chain.
- You'll also save time and internal resources by purchasing, stocking and formulating with just one Texturizing System instead of multiple ingredients.



OVERVIEW



CUSTOMIZED



EASY-TO-USE, CONVENIENT
AND COST EFFECTIVE



SMART, RELIABLE AND
QUALITY-ASSURED



HOME



CARGILL
ADVANTAGE



CUSTOM
SOLUTIONS



LABEL
FRIENDLY



AGILE
RESPONSE



APPLICATIONS

CUSTOM SOLUTIONS

Smart, Reliable and Quality-Assured

Cargill's Custom Texturizing Systems offer superior risk management and inventory control. Why buy and measure multiple ingredients for your products – such as emulsifiers, standardizing agents, colors and sweeteners – when you can add just one?

- **Cargill's Texturizing Systems reduce the chance of measuring issues due to human error.**
- **Sourcing one system, instead of multiple ingredients increases speed to market and drives increased sales**



OVERVIEW



CUSTOMIZED



EASY-TO-USE, CONVENIENT
AND COST EFFECTIVE



SMART, RELIABLE AND
QUALITY-ASSURED



HOME



CARGILL
ADVANTAGE



CUSTOM
SOLUTIONS



LABEL
FRIENDLY



AGILE
RESPONSE



APPLICATIONS

Label-Friendly

Transparency is a hallmark of Cargill's extensive global supply chain. We have extensive experience working with customers to readily provide solutions that meet consumers' expectations. We'll deliver a label-friendly Texturizing System that meets your needs.

- **Replace less desirable ingredients with label-friendly ingredients.**
- **Reduce the number of ingredients on the label.**
- **Use ingredients that may enable desirable claims (e.g., non-GMO, organic, vegetarian, gluten-free, etc.)**



Hassle-free

Cargill provides ingredient replacement solutions with innovative Texturizing Systems. And if we don't have an ingredient in our current portfolio, we will use our buying power to source the ingredients on your behalf.



Equivalent or improved performance



HOME



CARGILL
ADVANTAGE



CUSTOM
SOLUTIONS



LABEL
FRIENDLY



AGILE
RESPONSE



APPLICATIONS

Agile Response

Customers choosing to work with Cargill's Texturizing Systems team can feel confident that they have chosen a reliable, proven, customized solutions partner.



Solve formulation challenges.

Cargill becomes an extension of our customer's team as we provide access to our unparalleled technical, regulatory and R&D



Increase speed to market.

Texturizing Systems save both time and money on product development.



Quickly resolve unforeseen industry-wide issues such as ingredient supply shortages.





HOME



CARGILL
ADVANTAGE



CUSTOM
SOLUTIONS



LABEL
FRIENDLY



AGILE
RESPONSE



APPLICATIONS

APPLICATIONS

Dairy Texturizing Systems

Cargill offers tailored solutions for dairy applications. Our ready-to-use, label-friendly Texturizing Systems add value by combining multiple ingredients which lead to increased performance, ease-of use and reduced risk.

Solve problems such as viscosity, body, stability and texture with label-friendly Texturizing Systems.



Yogurt

Texturizing Systems based on corn starch and pectin increase stability during shelf life and replace commonly used texturizer modified food starch.

Sour Cream

Texturizing Systems based on corn starch or citrus fiber with xanthan and locus bean gum replace texturizers such as modified food starch, monoglycerides, diglycerides, phosphates and carrageenan.

Ice Cream

Texturizing Systems based on sunflower lecithin, locust bean gum, guar gum or carrageenan increase texture, provide heat shock control, and replace monoglycerides, diglycerides and cellulose gums.

Smoothies

Texturizing Systems based on corn starch and pectin increase stability during shelf life and replace commonly used texturizer modified food starch.

1

2

3



DAIRY TEXTURIZING
SYSTEMS



BAKERY TEXTURIZING
SYSTEMS
(Icing Stabilizers)



FRUIT PREP
TEXTURIZING SYSTEMS



BEVERAGE
TEXTURIZING SYSTEMS



CONVENIENCE
TEXTURIZING SYSTEMS

CONTINUE ON
NEXT PAGE



HOME



CARGILL
ADVANTAGE



CUSTOM
SOLUTIONS



LABEL
FRIENDLY



AGILE
RESPONSE



APPLICATIONS

APPLICATIONS

Dairy Texturizing Systems (CONTINUED)

Examples of Application Challenges and Potential Solutions

Application	Application Challenges	Desired Outcome	Products
Yogurt	Viscosity/Body	Remove MFS*	Vitex AYS 08 (WPC, Pectin) Vitex AYS 10 (Agar, Pectin) Vitex XN AYS 80 (Corn Starch, Gelatin)
Organic Yogurt	Organic compliant – non GM project	QAI** approved ingredients	Vitex AYS-0-19 (Organic Tapioca Starch, Organic Locus Bean Gum, Pectin, Carrageenan) Vitex AYS-0-25 (Organic Corn Starch, Organic Locus Bean Gum, Gellan Gum, Pectin) Vitex AYS-0-39 (Organic Tapioca Starch, Agar, Pectin) Vitex AYS-0-40 (Organic Tapioca Starch, Agar, Gellan Gum)
Drinkable Yogurt	Stability during shelf-life	Remove MFS**	Vitex XN AYD (Corn Starch, Pectin)
Sour Cream	Body & texture	Remove MFS* & Mono & Diglycerides	Vitex XN ASC 348 (Corn Starch, Xanthan Gum)
Sour Dressings	Trans Fat removal & texture matching	Remove Trans-Fats	Vitex XN ASD 48 (Corn Starch, Guar Gum, Sunflower Lecithin, Locus Bean Gum)
Cream Cheese	Texture & syneresis control	Label-friendly gums	Vitex AKC 25 (Salt, Guar Gum, Locus Bean Gum, Xanthan Gum)
Buttermilk	Stability during shelf-life	Remove MFS* & Mono & Diglycerides	Vitex XN ABA 30 (Corn Starch, Locus Bean Gum, Carrageenan)
Ice Cream	Creamy textures & heat shock control	Remove Mono & Diglycerides & Polysorbate 80	Vitex XN FN 120 (Locus Bean Gum, Guar Gum, Sunflower Lecithin, Carrageenan)
Multiple Applications	Stability/Body/Texture	Label-friendly ingredients	Vitex XN AMP 725 (Corn Starch Blend)

* MFS = modified food starch

** QAI = Quality Assurance International

These solutions are provided as examples only and potential solutions are dependent on the application and final formulation.

1

2

3



DAIRY TEXTURIZING
SYSTEMS



BAKERY TEXTURIZING
SYSTEMS
(Icing Stabilizers)



FRUIT PREP
TEXTURIZING SYSTEMS



BEVERAGE
TEXTURIZING SYSTEMS



CONVENIENCE
TEXTURIZING SYSTEMS

CONTINUE ON
NEXT PAGE



HOME



CARGILL
ADVANTAGE



CUSTOM
SOLUTIONS



LABEL
FRIENDLY



AGILE
RESPONSE



APPLICATIONS

APPLICATIONS

Dairy Texturizing Systems (CONTINUED)

Examples of Applications and Label Friendly Ingredient Alternatives

Application	Most Commonly Used Texturizers	Label-Friendly Alternative
Yogurt (blended)	Modified Food Starch, Gelatin	Texturizing systems based on Corn or Tapioca Starch, Pectin & Agar
Drinkable Yogurt Smoothies	Modified Food Starch	Texturizing systems based on Corn Starch & Pectin
Sour Cream	Modified Food Starch, Mono & Di-Glycerides, Phosphates & Carrageenan	Texturizing systems based on Corn Starch or Citrus Fiber with Xanthan Gum & Locus Bean Gums
Sour Dressings	Modified Food Starch, Mono & Di-Glycerides, Soy Lecithin, Carrageenan	Texturizing systems based on Corn Starch or Citrus Fiber, Sunflower Lecithin, with Guar & Locus Bean Gum
Ice Cream	Mono & Di-Glycerides, Cellulose Gums	Texturizing systems based on Sunflower Lecithin, Locus Bean Gum, Guar Gum, Carrageenan
Multiple Applications	Modified Food Starch, Mono & Di-Glycerides, MCC, Cellulose Gums	Texturizing systems based on Citrus Fiber, Rice Starch, Xanthan Gum, Agar, Locus Bean Gum, Guar Gum, Carrageenan


These solutions are provided as examples only and potential solutions are dependent on the application and final formulation.



123



DAIRY TEXTURIZING
SYSTEMS




BAKERY TEXTURIZING
SYSTEMS
(Icing Stabilizers)



FRUIT PREP
TEXTURIZING SYSTEMS



BEVERAGE
TEXTURIZING SYSTEMS



CONVENIENCE
TEXTURIZING SYSTEMS



HOME



CARGILL
ADVANTAGE



CUSTOM
SOLUTIONS



LABEL
FRIENDLY



AGILE
RESPONSE



APPLICATIONS

APPLICATIONS

Bakery Texturizing Systems

High-quality, high-strength agar is key to producing an effective donut glaze stabilizer. Many glaze stabilizers have slowly been diluted over the years to help control rising agar costs. Some no longer have the gel strength needed to produce a stable glaze. If you are experiencing issues with donut glaze weeping, your stabilizer may contain diluted agar.



Cargill will never dilute our functional ingredients to save money. Our donut glaze stabilizers contain high levels of the highest quality agar available.

- **Control viscosity, firmness and setting time. Reduces adhesion to bakery products or wrappers.**
- **Increase shelf life by limiting moisture migration and maintaining balance of dissolved/un-dissolved sugars**
- **Support freeze/thaw cycles**

1

2

3



DAIRY TEXTURIZING
SYSTEMS



BAKERY TEXTURIZING
SYSTEMS
(Icing Stabilizers)



FRUIT PREP
TEXTURIZING SYSTEMS



BEVERAGE
TEXTURIZING SYSTEMS



CONVENIENCE
TEXTURIZING SYSTEMS

CONTINUE ON
NEXT PAGE



HOME



CARGILL
ADVANTAGE



CUSTOM
SOLUTIONS



LABEL
FRIENDLY



AGILE
RESPONSE



APPLICATIONS

APPLICATIONS

Bakery Texturizing Systems (CONTINUED)

Icing Stability Issues

Concern	Solution
Provide body	Increase colloid or granulated sugar for firmer set. Choose correct fat source.
Increase viscosity	Reduce sugar syrup. Increase colloid content, add Locus Bean Gum, guar gum, alginate or CMC*. Deposit at lower temperature.
Decrease viscosity	Increase sugar syrup. Choose low-viscosity colloids. Deposit at higher temperature.
Prevent syneresis	Add Locus Bean Gum, guar gum, CMC* or good, water-binding colloid.
Speed drying and set	Add calcium carbonate or calcium sulfate and choose correct fat source and emulsifier.
Prevent stickiness	Reduce amount of corn syrup. Increase granulated sugar.
Prevent cracking	Increase corn syrup. Choose correct fat source.
Improve sheen	Use higher level of monoglycerides or add maltodextrin, gelatin or gum arabic.

* CMC = carboxymethyl cellulose

1

2

3



DAIRY TEXTURIZING
SYSTEMS



BAKERY TEXTURIZING
SYSTEMS
(Icing Stabilizers)



FRUIT PREP
TEXTURIZING SYSTEMS



BEVERAGE
TEXTURIZING SYSTEMS



CONVENIENCE
TEXTURIZING SYSTEMS

CONTINUE ON
NEXT PAGE



HOME



CARGILL
ADVANTAGE



CUSTOM
SOLUTIONS



LABEL
FRIENDLY



AGILE
RESPONSE



APPLICATIONS

APPLICATIONS

Bakery Texturizing Systems (CONTINUED)

Cargill Range for Icing Stabilization

Texturizing System	Icing Type	Ingredients	Characteristics
Gelogen™ GIT 1600	Glaze, Flat, Crème	Calcium carbonate, sugar, calcium sulfate, dextrose, agar, Locus Bean Gum, SHMP*	Thick set, pliable, freeze-thaw
Gelogen™ GIT 32	Glaze, Flat, Crème	Calcium carbonate, sugar, calcium sulfate, dextrose, agar, Locus Bean Gum, SHMP*	Thick viscosity and set, good stability
Gelogen™ GIT 1800	Crème	Sugar, dextrose, agar, Locus Bean Gum, SHMP*	Good for butter crèmes
Gelogen™ GIT 04	Glaze, Flat	Agar, sugar, dextrose	Clear, high viscosity

Gelogen™ GIT (translucent/clear) series

Texturizing System	Icing Type	Ingredients	Characteristics
Gelogen™ GIW64	Flat icing	Calcium carbonate, sugar, agar, salt, emulsifier, TiO2**	High viscosity and stability, rapid set
Gelogen™ GIW34	Flat icing	Calcium carbonate, sugar, agar, salt, emulsifier, TiO2**	High viscosity and stability, rapid set
Gelogen™ GIW02	Flat icing	Calcium carbonate, sugar, agar, salt, TiO2**	Thin viscosity and set, opaque, light coating
Gelogen™ GIW04	Flat icing	Calcium carbonate, sugar, calcium sulfate, dextrose, agar, TiO2**, SHMP*, Locus Bean Gum	

Gelogen™ GIW (white) series

* SHMP = sodium hexameta phosphate
** TiO2 = Titanium Dioxide

1

2

3



DAIRY TEXTURIZING
SYSTEMS



BAKERY TEXTURIZING
SYSTEMS
(Icing Stabilizers)



FRUIT PREP
TEXTURIZING SYSTEMS



BEVERAGE
TEXTURIZING SYSTEMS



CONVENIENCE
TEXTURIZING SYSTEMS



HOME



CARGILL
ADVANTAGE



CUSTOM
SOLUTIONS



LABEL
FRIENDLY



AGILE
RESPONSE



APPLICATIONS

APPLICATIONS

Fruit Prep Texturizing Systems

Cargill offers tailored solutions for fruit fillings applications to optimize texture.

Gelogen™ GB Series

Gelogen™ GB series are compatible with low-water-activity formulations providing flowing to firm textures for bake-stable or post-bake fillings in bakery products.

Vitex™ OF Series

Vitex™ OF series are stabilizer systems used in low-fruit-content and low-soluble-solids fruit preparations. This stabilizer system is easy to incorporate into a fruit system. It gives a rich viscosity with a non-gelled texture, while preventing fruit floatation at standard fill temperatures.



DAIRY TEXTURIZING
SYSTEMS



BAKERY TEXTURIZING
SYSTEMS
(Icing Stabilizers)



FRUIT PREP
TEXTURIZING SYSTEMS



BEVERAGE
TEXTURIZING SYSTEMS



CONVENIENCE
TEXTURIZING SYSTEMS



HOME



CARGILL
ADVANTAGE



CUSTOM
SOLUTIONS



LABEL
FRIENDLY



AGILE
RESPONSE



APPLICATIONS

APPLICATIONS

Beverage Texturizing Systems

Cargill offers tailored solutions for beverage applications to improve viscosity and mouthfeel of beverages.

Vitex™ QMF and Trillisse™ QMF Series

Vitex™ QMF and Trillisse™ QMF series are viscosifiers which give low- or no-calorie beverages a viscosity and mouthfeel similar to full-calorie beverages. They can be used in acidic beverages (pH 2.5 to 4.5), with or without fruit, using conventional or high intensity sweeteners, at a dosage between 0.02% and 0.2%.

Vitex™ ABN Stabilizer Systems

Vitex™ ABN stabilizer systems improve creaminess, body and viscosity of neutral dairy-based beverages and non-dairy-based beverages (soy, almond, coconut). These stabilizers also control phase separation during shelf life.



DAIRY TEXTURIZING
SYSTEMS



BAKERY TEXTURIZING
SYSTEMS
(Icing Stabilizers)



FRUIT PREP
TEXTURIZING SYSTEMS



BEVERAGE
TEXTURIZING SYSTEMS



CONVENIENCE
TEXTURIZING SYSTEMS



HOME



CARGILL
ADVANTAGE



CUSTOM
SOLUTIONS



LABEL
FRIENDLY



AGILE
RESPONSE



APPLICATIONS

APPLICATIONS

Convenience Texturizing Systems

Cargill offers many Texturizing Systems solutions for convenience applications. Our broad portfolio of texturizers, vegetable proteins and emulsifiers can help manage any situation. These Texturizing System solutions take the complexity out of product development.

Dressings

Texturizing Systems for Dressings include a range of texturizers, starches, hydrocolloids, and vegetable proteins. These texturizing solutions are stable in acidic systems and through high shear. Cargill also offers emulsifying starches and lecithin Texturizing Systems for your emulsification needs or for egg replacement.

Commonly-Used Texturizers

- Modified Starch
- Guar Gum
- Xanthan Gum

Label-Friendly Alternatives

- ✓ Starch
- ✓ Pea protein

Instant Soups and Sauces

Texturizing Systems include starches and hydrocolloids to provide instant viscosity in instant soup and sauce applications. Cargill also offers emulsifying starches for those instant applications needing emulsification. Additionally, Cargill offers bulking agents such as maltodextrin, corn syrup solids and chicory root fiber.

Commonly-Used Texturizers

- Modified Starch
- Maltodextrin

Label-Friendly Alternative

- ✓ Starch

Sauces

Texturizing Systems include starches, hydrocolloids and vegetable proteins. These texturizers are stable in acidic systems, through high shear, as well as through high processing temperatures. Cargill also offers emulsifying starches and lecithin for your emulsification needs or for egg replacement. Additionally, Cargill offers bulking agents such as maltodextrin, corn syrup solids and chicory root fiber.

Commonly-Used Texturizers

- Modified Starch
- Guar Gum

Label-Friendly Alternative

- ✓ Starch



DAIRY TEXTURIZING
SYSTEMS



BAKERY TEXTURIZING
SYSTEMS
(Icing Stabilizers)



FRUIT PREP
TEXTURIZING SYSTEMS



BEVERAGE
TEXTURIZING SYSTEMS



CONVENIENCE
TEXTURIZING SYSTEMS