

Solutions for sweet success

Beverage solutions



Cargill,
your partner
for co-creating
growth in
Beverages

Leverage our passionate beverages experts with deep ingredient, application and category knowledge.
We're here to support you by developing and testing fully integrated solutions that deliver consumer-pleasing beverages.





Insights-driven innovation:

Complement your insights with our research into market trends and consumer needs to develop consumer-pleasing beverages



Broad solutions portfolio:

Leverage our broad Cargill ingredient portfolio and our partnership to deliver fully integrated solutions



Enhanced expertise:

Tap into reliable, knowledgeable and highly skilled beverages experts and state-of-theart facilities that are close at hand



Accelerated sustainability:

Advance your sustainability goals by leveraging our sustainability actions and commitments across the supply chain

Trusted supplier:

Scale, grow and thrive thanks to global supply chains and alternative solutions to help manage your costs



Sweeteners

Cargill offers one of the broadest sweetness portfolios, ranging from full- to no-calorie options, and high intensity sweeteners to offer choice to customers and consumers. Whether you're creating a new, full sugar product or (re-) formulating for balanced nutrition, we offer a complete toolbox of solutions for sweet success.

Product type/name Features & Benefits

High intensity sweeteners

0 kcal/g, Enables sugar and calorie reduction/ replacement

Stevia
Truvia®

- · High Purity Reb A from the stevia leaf
- · Cost-effective sugar reduction up to 3% SEV

ViaTech®

- Proprietary, synergistic blends of Steviol Glycosides designed for optimal taste and sweetness
- · Sugar reduction up to 6% SEV
- Reduces bitterness and licorice off-notes

No-calorie sweeteners

0 kcal/g, Enables sugar and calorie reduction, Sweetness adjustment

Erythritol¹ Zerose[®]

- Sweetness and taste profile similar to sucrose
- Synergistic with high-intensity sweeteners, masks off-flavors
- · Adds smoothness and body
- · Good digestive tolerance

Stevia

Cargill scientists have spent over 300,000 hours studying the unique properties of the stevia leaf.



Our broad portfolio of stevia sweeteners, proven formulation expertise and deep market insights translate into your competitive advantage. A rigorous specification process ensures consistent product quality – regardless of growing season – for your end-products. Cargill's agricultural stevia program has been benchmarked at Silver level by Farm Sustainability Assessment (FSA) 3.0² – becoming the first stevia producer in the industry with our entire grower network evaluated that achieved this distinction.



Cargill.com/food-bev/emea/sweeteners/stevia



Cargill.com/sustainability/sustainable-stevia





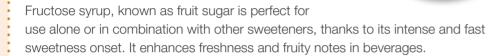


¹ Steviol glycosides and polyols are permitted in most energy reduced foods or foods with no added sugars under "quantum satis" or under conditions of use. Foods with over 10% polyol content must carry a label "Excessive consumption may cause laxative effects" (EU Reg. 1333/2008 on food additives).

² FSA is a standardized reference developed by SAI Platform, a food-industry organization dedicated to advancing sustainable agriculture in the food chain. It's designed to help producers assess their sustainable practices and support manufacturers in sourcing sustainably grown products. ISO/TS 19657:2017 (https://www.iso.org/news/ref/2254.html)

C★TruSweet® 01795 Fructose syrup

A 95% fructose syrup which enables 30% sugar and calorie reduction and delivers cost and usage efficiencies on top.



It enables a 100% sucrose replacement by 70% fructose syrup, as fructose is 20 to 40% sweeter than sucrose. Further reductions are feasible when paired with stevia. A ready to use syrup, it is easy to handle, highly soluble and cost advantageous versus crystalline fructose or sucrose.

MaltWise® M

MaltWise® M wheat and barley malt syrup sets itself apart from other traditionally used brewing adjuncts. Made from wheat treated with malted barley, the syrup undergoes only mild filtration and concentration, helping to ensure nutrients and minerals remain present in the syrup. These compounds deliver important benefits to yeast fermentation. Moreover, as it is a 45DE syrup, it delivers nice mouthfeel and wellroundedness when not fermented 100%. Thanks to its light grainy taste and pale yellow color, it's a perfect fit for beer in terms of color and flavor profile.



Cargill.com/MaltWise

Product type/name **Features & Benefits** Full-calorie sweeteners 4 kcal/q, Bulk sweeteners · Low to moderate relative sweetness Glucose syrup C☆Sweet® · Medium to high viscosity, body and mouthfeel · Reduced risk of sugar recrystallization High dextrose syrups (>90% dextrose) serve as functional adjunct for fermentation · High maltose syrups (>45% DP2 or maltose) as functional adjunct for fermentation, also improving body of the beer · Glucose syrups with a lower DE can help bring mouthfeel and body. especially important in low and no alcohol beers Glucose-fructose syrup · Moderate to high relative sweetness C☆TruSweet® · Cost-effective sugar replacement Fructose syrup · Very high relative sweetness (1.20 - 1.40 vs sucrose) C☆TruSweet® 01795 Enables 30% claimable sugar and calorie reduction and deeper levels of reduction in combination with stevia · Enhances freshness and boosts fruity flavors **Dextrose** · High relative sweetness (0.7), typical sweet taste C☆Dex® Flavor enhancement Monohydrate or anhydrous powder, variety of particle size distributions · Rapid source of energy in e.g. energy drinks · Ideal carbohydrate source for yeast fermentation in brewing Wheat & barley malt syrup Milder relative sweetness MaltWise® M · Label-friendly and unrefined — meets ISO natural definition* Offers benefits for yeast fermentation and rehydration after exercise · Helps to bring back body and mouthfeel, especially important in low and no alcohol beers





Texturizers

Second only to taste is sensory enjoyment. At Cargill, we couple our texture and emulsification solutions with our in-depth application and technical expertise, to address your most challenging formulation needs. Whether you're rebuilding body and mouthfeel while reducing sugars or designing palate-pleasing textures, we offer a complete toolbox of solutions for sweet success.

Starches for emulsions

Cargill offers a portfolio of spray-dried n-OSA waxy starches (EmCap®, EmulTru®) that help to create cold storage stable drinks with no clouding. Easy to use, they support development of vegan solutions and deliver stability over shelf life, whilst lowering processing costs and complexity in beverage emulsions.

Based on specialized starch modification technology, with readily available raw material, these starches can provide a cost-effective alternative to gum Arabic or sodium casinate, helping you manage your formulation costs.

Product

Features & Benefits

Modified starch: maize, waxy maize, tapioca

EmCap® EmulTru®

- Modified starches that deliver good emulsification and texture stability whilst reducing processing costs
- EmCap® delivers good emulsification suitable for transparent beverage emulsions
- EmulTru® delivers very strong emulsification and excellent cold storage stability in wide variety of beverage applications

C☆PulpTex®

Helps to mimic pulp effect in powdered soft drinks and

Dried glucose & Maltodextrin

C☆Dry® GL C☆Dry® MD C☆Dry® A C☆NutriDry®

- · Low relative sweetness
- · Serves as a bulking agent, bringing body and mouthfeel
- · Neutral taste
- · Delivers readily available carbohydrates
- Easily dilutable, it is quick and easy to process

Xanthan gum

Satiaxane®

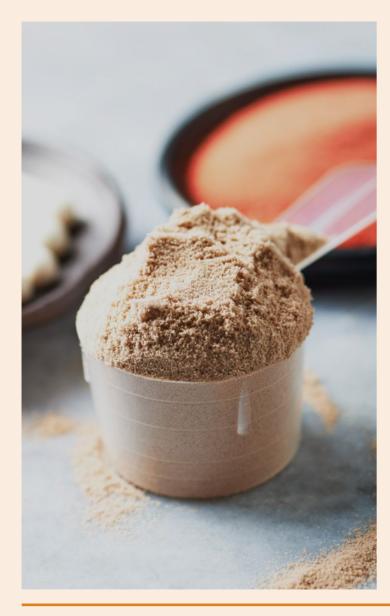
- · Thickening, suspension and stabilizing agent
- · Stability in acid conditions and under heat treatment
- · Can be applied effectively at very low dosage

Pectin

UniPECTINE®

- Label-friendly thickener, gelling agent and texturizer
- · Stabilizes proteins
- Brings enhanced body and mouthfeel can enable a wide range of textures, making it suitable for a wide variety of beverages
- · Very good acid stability
- Supports sugar reduction by rebuilding mouthfeel and viscosity
- Can help to create a cloudy solution for low-juice beverages





Lecithin

Caraill is your lecithin go-topartner for growth. Together, we can identify the best solution to overcome your business challenges. We offer an extensive range of lecithin products for beverage applications, both in terms of formats (de-oiled, fluid, fractionated), botanicals (soy, sunflower, rapeseed) and quality grades (FQ-MaxX, Premium, Standard). We ensure safe and compliant lecithin products through our Solid Supplier Management System, including non-GMO and organic options. And thanks to our global scale, we can minimize impact on your and our supply chains.

With over 70 years of experience, we are your trusted global partner with local expertise, insights, and knowhow, focused on your growth.

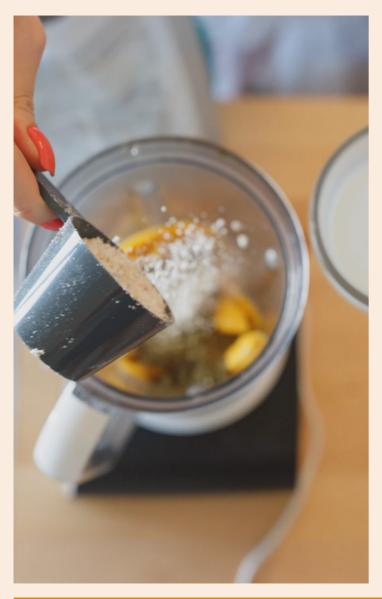
Emulfluid®

Product type / name **Features & Benefits** De-oiled lecithin: Highly concentrated lecithin with low dosage rate Regular lecithin · Available in various botanicals and quality grades Fmulpur® · Neutral flavor & color - suitable for most fluid and powdered beverage Lecigran® applications · HLB¹ value approx. 4-5: soluble in oil/ fat, water dispersible, more hydrophilic versus fluid regular lecithin **Hydrolyzed lecithin** Available in NGM Soy and Sunflower Emultop® · Neutral flavor & color - less taste impact versus fluid hydrolyzed lecithin · HLB value approx. 6-8: soluble in oil/ fat, water dispersible, improved emulsification behavior · Available in NGM Sov Fractionated PCenriched lecithin · Natural Choline source - suitable for meal replacements and supplements Epikuron® · HLB value approx. 4-6: soluble in oil/fat, water dispersible, improved emulsification behavior Fluid lecithin Regular lecithin · Available in various botanicals and quality grades Leciprime® · Suitable for both fluid and powdered beverage applications Topcithin® · HLB value approx. 3: easily soluble in oil/fat Low viscous lecithin Available in NGM Soy and Sunflower Metarin® · Ready-to-spray - does not require further dilution. Reduces processing complexity and safety risks and is ideal for powdered beverages applications · Adjusted low viscosity · HLB value approx. < 3 **Hydrolyzed lecithin** · Available in GM and NGM Sov Emulfluid® · Improved functionality as instantizing agent · Suitable for most powdered beverage applications such as chocolate drinks, protein drinks and meal replacements · HLB value 6-8: more hydrophilic versus fluid regular lecithin **Fractionated PC** Available in GM and NGM Soy · Balanced phospholipids profile (Phosphatidylcholine) -enriched · Low dosage rate · Natural choline source - suitable for fluid or powdered meal replacement lecithin



· HLB value approx. 4-6: soluble in oil/ fat, more efficient emulsification

behavior versus regular fluid and de-oiled lecithin



Plant proteins

Modern-day consumers have high expectations for beverages. Not only must they taste great; increasingly, shoppers look to satisfy a complex array of goals around health and nutrition. Proteins are an important nutritional source supplying the body with essential amino acids that it cannot synthesize on its own. Beyond nutrition, these affordable, plant-sourced proteins provide many functional benefits, while their neutral taste profile makes them easy to incorporate in a variety of protein-enriched beverages.

Product type Product name(s) Features & Benefits

Wheat Proteins Vital wheat gluten & Hydrolyzed wheat protein	Gluvital® Prowliz®	Enables protein enrichment Unique texturizing properties
		Mild taste profile
		Min. 75% protein content
Pea Protein Isolates & Hydrolyzates	PURIS™* RadiPure®	Enables protein enrichment
		Great functionality

Superior taste profileMin. 80% protein content

Pea protein

For Plant-based beverages & sports nutrition.

Benefits of our range:

- Outstanding solubility and stability at optimal pH range for acidic and neutral dairy drinks
- Mild flavor versus other pea protein isolates
- Smooth texture, great mouthfeel, less chalkiness than other (pea) proteins
- Delivers desired viscosity across a range of protein inclusion levels



* Licensed Trademark of Puris Proteins



Fibers

Many consumers struggle to reach the daily recommend fiber intake levels. That is why Cargill is offering fortification options that can support consumers to close the fiber gap, but that can also offer functional benefits on top.



Product type/name

Citrus Fiber CitriPure®

Features & Benefits

- Supports fiber enrichment thanks to its intrinsic balanced mix of 40% soluble fiber and 60% insoluble fiber, enabling Nutri-Score improvement
- Can help with viscosity and suspension in sugar-reduced cloudy beverages and juices

Soluble corn and wheat fiber Cargill™ soluble fiber

- Supports fiber enrichment thanks to its high fiber content, enabling sugar and calorie reduction and/or Nutri-Score improvement
- Made using exclusively licensed microreactor technology developed in partnership with Germany's Karlsruhe Institute for Technology
- · Low color and off-taste
- Can offer improved stability, easy handling, and scalability
- · Available in both powder and liquid forms

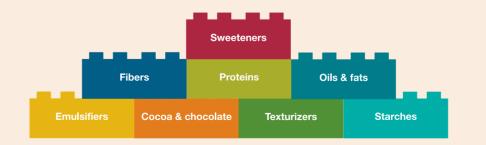




INFUSE by CargillTM Functional Systems

Blended ingredient solutions for winning on-trend products

Under our INFUSE by Cargill™ service offering we provide blended solutions to help fast forward your product development. We bring together Cargill's extensive ingredient portfolio and our 50+ years' experience in blending functional solutions. We can tailor the exact solution to your needs. Explore some of our building blocks for your product development:



Product type/name

Features & Benefits

Sugar replacement blend

Trilisse® QSR 900

- Ingredient blend consisting of steviol glycosides from stevia and sucralose
- Zero calorie blend, enabling sugar-free claim
- Delivers a well-balanced sweetness.
- Helps to bring a more natural component/ alternative to popular artificial sweetener combination of Ace K & sucralose

Mouthfeel enhancement blend Trilisse® QMF 50

- Ingredient blend consisting of pectin and qum Arabic
- · Plant-based solution for mid-calorie reduction recipes
- Helps achieve sugar & calorie reduction claims without impacting sensory attributes:
 - Brings back lubricity and viscosity missing in low/ zero calorie beverages
 - Great synergies with stevia
- Cost-competitive solution: Use our calculator to determine needed dosage of Cargill stevia and Trilisse®

Protein enrichment blend Trilisse® MM100

- Ingredient blend consisting of pea and rice protein
- Solution for plant-based formulation of protein-enriched muscle building sports powders
- Delivers the right level of Essential Amino Acids, in particular leucine, isoleucine and valine (BCAA)
- Helps to deliver clean taste profile and mouthfeel
- · Easily dispersed and cold soluble





Cocoa and chocolate

Goodness comes in many forms. Our cocoa powders offer endless possibilities of alluring colors, stand-out signature tastes, different fat options, organic and sustainable certifications and guaranteed consistency across the board. If you're looking for unique customized perfection, Gerkens® can make a powder that can transform your beverages.

Sweety:

A game-changing range of cocoa powders for the beverage market

- 2 new cocoa powders with different flavor profiles
- Enabling 30% sugar reduction in a natural way, without the need for additional sweeteners
- Taste loved by consumers confirmed in consumer tests with both adults* and kids**



gerkenscocoa.com/gerkens-sweety-range/

Product type/name

Features & Benefits

DP70:

- Provides a round mouth feel and a more intense cocoa taste thanks to being naturally richer in cocoa fat (high-fat)
- Offers just the right composition for heat treatment in combination with dairy proteins, as identified by our Cocoa Engineers

DR74:

- Thanks to months of development and finetuning by our Cocoa Engineers, the DR74 offers you the ultimate blend of cocoa building blocks
- Our most balanced powder offering a gentle red colored cocoa powder combined with a mild, balanced cocoa flavor

Sweety Range:

- Targeted to enable 30% sugar reduction in the end application, in a natural way (i.e. without adding any sweeteners or artificial ingredients)
- Low in bitterness but still maintaining a strong well balanced chocolaty flavor with a strong sweet perception by consumers
- · SRB100 is stronger in chocolate/ cocoa flavor

Cargill

· SRB200 is stronger in creaminess and more



^{*} Source: Cargill Consumer Community, 90 adults

^{**}Source: Cargill Consumer Research with Ipsos, 150 kids





Decorations and inclusions

Consumers are actively seeking enriched experiences that captivate all their senses, starting with the visual appeal and subsequently delight their palates. We offer a broad expertly crafted portfolio of decorations and inclusions to create a distinctive visual and textural allure for your products and to set the stage of what is lying ahead: an extraordinary sensorial experience.

Fats and oils

Rely on us to help you create quality beverages with our broad range of liquid oils, tropical fat oils and extensive refining, blending and modifying facilities across Europe. Helping with flavor enhancement, texture and structure development, our fats and oils make your beverages enticing to consumers.

We have the broadest portfolio of oils and fats around the globe. Our global sourcing capabilities and in-depth control of the supply chain allow us to source high-quality raw materials tailored to the specifications of all our customers.

Our base oils are rapeseed, sunflower, linseed, groundnut, coconut and palm kernel oil.





Cargill's Food Solutions





The information contained herein is believed to be true and accurate. However, all statements, recommendations or suggestions are made without guarantee, express or implied, on our part. WE DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE and FREEDOM FROM INFRINGEMENT and disclaim all liability in connection with the use of the products or information contained herein. All such risks are assumed by the purchaser/user. The information contained herein is subject to change without notice.