

Solutions for sweet success

Sugar confectionery solutions, Europe



Cargill,
your partner
for co-creating
growth in Sugar
Confectionery

Leverage our passionate sugar confectionery 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 treats.

Our secrets to your sugar confectionery success:



Insights-driven innovation:

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



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 sugar confectionery experts and state-of-the-art facilities that are close at hand



Accelerated sustainability:

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



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

We can help you find solutions for:

- ☑ Pastilles, gummies, jellies and chews
- **☑** Boiled sweets
- ✓ Lollipop
- **✓** Licorice
- Marshmallows
- ☑ Toffees, caramels and Nougat
- ☑ Gum
- **✓ Mints**
- ☑ Medicated confectionery

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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
IOGGOL	i y p c/ i tui i i c	i outuioo	or Dollolle

Full-calorie sweeteners
4 kcal/g, Bulk sweeteners
Oliverse summer

Glucose syrups C☆Sweet®

- · Low to moderate relative sweetness
- Medium to high viscosity, body and mouthfeel
- · Helps to adjust sugar recrystallization

Glucosefructose syrup C☆TruSweet®

- · Moderate to high relative sweetness
- · Cost-effective sugar replacement
- · Non crystallizing at ambient temperature

Dextrose C☆Dex®

- · High relative sweetness, typical sweet taste
- · Flavor enhancement
- Monohydrate or anhydrous powder, variety of particle size distributions
- · Quick energy release
- · Good solubility

C★Sweet® & C★TruSweet®

Glucose-, fructose and glucosefructose syrups

Cargill offers an extensive range of high-quality, full-calorie sweeteners based on a unique blending concept. Our flexible processes enable us to produce tailor-made glucose syrups and glucose-fructose blends, with functional and sweetness properties customized to suit individual customer needs. Our syrups are ready to use, can help regulate texture along shelf life and can offer cost-competitive sucrose replacement opportunities. Cargill can offer sweeteners produced from sustainably sourced corn and wheat, benchmarked at Silver level.¹





Silver level applicable to Europe only. 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/ref2254.html)

Product Type/Name Features & Benefits

Low- and no-calorie sweeteners1

2.4 to 0 kcal/g, Bulk sweeteners, Sugar and calorie reduction, Toothfriendly

Isomalt	· Mild relative sweetness
IsoMaltidex®	· Clean, sucrose-like taste profile
	Reduced stickiness – unique for use in unwrapped candy
Maltitol Maltidex®	 Similar sweetness, cooling effect and behavior to sucrose
	· Boosts fruity flavors
	· Good humidity and crystallization control
	 Higher viscosity leading to better processability
Mannitol	· Milder relative sweetness
C☆Mannidex®	· Clean, cool and refreshing taste
	· Reduces stickiness in candy
	· Improves elasticity
Sorbitol	· Milder relative sweetness
C☆Sorbidex®	· Cost-effective
	 Good humidity and moisture control properties
	Balances and stabilizes plasticity and mouthfeel
Erythritol	· Zero calories
Zerose [®]	· Sweetness and taste profile close to sucrose
	 Synergistic with high-intensity sweeteners, masks off-flavors
	 Strong cooling effect and fast crystallization
	· Adds smoothness and body

Product Type/Name Features & Benefits

High-intensity sweeteners¹

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

Steviol glycosides from stevia

Truvia® · High Purity Reb A

· Cost-effective sugar reduction

· Clean, sweet taste

ViaTech®

 Proprietary, synergistic blends of Steviol Glycosides designed for optimal taste and sweetness

Clean taste allows for deeper sugar reduction

· Reduces bitterness and licorice off-note

Steviol glycosides from fermentation

EverSweet® 2

 Advanced fermentation techniques bring to life stevia's sweetest elements – steviol glycosides Reb M and Reb D

Sugar reduction up to 8% SEV, with further reduction possible in combination with flavor modulators or other flavor enhancers like erythritol

Stevia

Cargill's agricultural stevia program has been benchmarked at Silver level by Farm Sustainability Assessment (FSA) 3.0³ – becoming the first stevia producer in the industry with our entire grower network evaluated that achieved this distinction.



Cargill.com/sustainability/sustainable-stevia

truvía





A life cycle assessment (LCA) shows that EverSweet® advanced fermentation techniques result in improved environmental performance in key metrics such as carbon footprint, water use and land use impact compared to production from leaf or bioconversion, or traditional sugar.⁴

EverSweet®



- 1 Steviol glycosides and polyols are permitted in most energy or sugars reduced foods 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 Product of Avansya, a joint venture between Cargill and dsm-firmenich. EverSweet® is already authorized for sale in the UK. It has also received a positive safety opinion from EFSA. Authorization for placing it on the market in the EU is expected at the beginning of 2025.
- 3 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/ref2254.html)
- 4 LCA results have undergone a ISO14040/44 panel review, underlying report available upon request.





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 help 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.

Product Type/Name Features & Benefits

Starch

Native Moulding Starches Corn

C☆CleanSet®

- · Enables clean release from depositing moulds
- · Enhances tray printing by reducing starch adhesion to the mould
- · Ensures that shape is retained prior to depositing
- Premium and stabilized quality, mogul line manufacturer reliable

Native and Modified Gelling Starches Corn, Tapioca C☆Set®, C☆ClearSet®,

- C☆AraSet®, C☆Stretch®
- Creates opaque gels, with a variety of textures from soft/ flexible to hard, depending on the dosage rate and the exact starch
 - Easy to deposit low hot viscosity
 - · Low setting temperature

Modified Coating Starch Tapioca C☆AraSet®

- Specifically designed for replacing gum Arabic when used as a pre-coating agent or in fat-based fillings before coating
- · Facilitates cooking and depositing of confectionery jellies and gums: easy dispersion, neutral taste, lower viscosity, high clarity
- · Supports the creation of a wide range of textures (i.e., from strong to soft)
- · Sugar-free compatible

Moulding starches

Cargill is uniquely positioned to help you optimize your starch gum production:

- · Make use of our moulding starch service analysis for our customers and industrial partners, to help you understand different starch structures and behaviors and help detect and prevent problems
- Be advised on the suitable grade of moulding starch to be used as processing aid

The Carqill CleanSet® series is a premium-quality moulding processing aid with superior performance compared to native corn starch which helps to develop the different shapes and sizes of the confectionery products according to your requirements.



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Product Type/Name Features & Benefits Pectin · Label-friendly, familiar thickening and gelling agent, sourced from citrus peels Pectin UniPFCTINF® or apple pomace · Can be used as an alternative to gelatin, to formulate plant-based solutions Characteristic short bite and clean flavor release · Higher melting point helps prevent them from sticking or melting · Supports sugar reduction by adding back the mouthfeel and richness that are lost when sugar is removed Carrageenan · Water soluble polysaccharides extracted from red seaweeds with thickening, Satiagel® stabilizing and gelling properties · Variety of textures can be created, from very soft and elastic to firm and brittle · Fast gelling as soon as the temperature decreases Lecithin · Label-friendly emulsifier Fluid Lecithin Sov Rapeseed Provides excellent emulsifying properties (GM/NGM) and Sunflower Topcithin® Reduces surface tension Leciprime Promotes even blending Emulfluid® · Improves texture & mouthfeel Reduces stickiness · Improves chewability

UniPECTINE®

Cargill's broad range of high-quality pectin solutions is designed to meet texture and functional needs in your target applications.

Our solutions include options that offer functionality in both acid and neutral environments, lower and higher sugar concentrations, as well as high-temperature processing. Our technical experts are right there with you to unlock the optimal level of gel strength and viscosity needed to deliver creative confectionery products.

The right pectin to meet your specific needs — a one-stop pectin shop for formulation success

Consistent product quality and full controllability for the targeted (sub) application, giving you peace of mind

Reliable pectin supply allowing you to expand and plan for the future

Dedicated application and technical experts to help you unlock the best out of pectin's possibilities

Wide ingredient offer and formulation knowledge beyond pectin to take your final product even further



Cargill.com/emea/pectin







Plant proteins

Modern-day consumers have high expectations for sugar confectionery. Not only must these products 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 offers or plant-based sugar confectionery.

Product Type/ Name

Features & Benefits

Plant proteins

Pea Protein Isolates & Hydrolysates

- · 80% protein content
- Can enable source of/ high in protein claims
- Similar aeration properties as gelatin, enabling a softer texture
- Can support plantbased formulation
- Sustainability benefits





Fibers

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

Product Type/Name	Features & Benefits
Soluble fiber	
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
	· Low color and off-taste
	· Can offer improved stability, easy handling, and scalability
Functional fiber	
Citrus fiber CitriPure®	 Supports fiber enrichment thanks to its intrinsic balanced mix of 40% soluble fiber and 60% insoluble fiber, enabling Nutri-Score improvement
	 Can help with texture enhancement: thickening, texturizing, binding, bulking & emulsification boosting



INFUSE by Cargill™ 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:

Fibers

Emulsifiers

Proteins

Texturizers

Cocoa & chocolate



Starches



Cocoa and chocolate

Cargill's global portfolio of quality cocoa and chocolate ingredients can help you create delicious confectionery solutions

Product Type/Name Features & Benefits

Cocoa powder

Gerkens® range of cocoa powders

 High-quality cocoa powders for consistently vivid color and delicious taste

Chocolate

a variety of standard and specialty chocolates for sensory excitement and on-trend claims · ExtraVeganZa vegan chocolate

· Bright White chocolate

· Organic chocolate

· Sugar-reduced chocolate

· Single origin dark chocolates





Sugar confectionery solutions, Europe



Decorations and inclusions

Confectionery lovers 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 & Oils

Rely on us to help you create quality confectionery products 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 confectionery products 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 typically used for sugar confectionery include coconut and palm kernel oil.





Cargill's Food Solutions



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