Sweetener selection guide

6 ranges, 59 grades and the decision each one serves

A STARTING POINT FOR THE BENCH TRIAL, NOT A SUBSTITUTE FOR THE SPECIFICATION.

HOW TO USE THIS GUIDE

Choose the job first: a high-intensity top note, a bulk sweetener, a rare sugar with browning, or a soluble fibre with body. The table below gives the indicative sweetness, the primary specification and the applications for each published grade. The product page carries the full specification, the taste note and the technical documents.

RANGE	GRADE	PRIMARY SPECIFICATION	SWEETNESS	APPLICATIONS
Plant-derived	Steviol Glycosides 95%	≥95.0% (HPLC)	200–300 × sucrose, indicative	Beverages · Tabletop sweeteners · Dairy and plant-based drinks
	Rebaudioside A 98%	≥98.0% (HPLC)	200–300 × sucrose, indicative	Beverages · Tabletop · Dairy alternatives
	Rebaudioside M 95%	≥95.0% (HPLC)	250–350 × sucrose, indicative	Premium beverages · Tabletop · Dairy alternatives
	Monk Fruit Extract 50%	≥50.0% (HPLC)	150–250 × sucrose, indicative for a 50% Mogroside V extract	Beverages · Tabletop · Dairy alternatives
	Glycyrrhizin 98%	≥98.0% (HPLC)	50–100 × sucrose, indicative; slow onset and a long liquorice linger	Flavour systems · Confectionery · Sauces
	Naringin Dihydrochalcone (NDC) 98%	≥98.0% (HPLC)	1,000–2,000 × sucrose, indicative	Beverages · Confectionery · Flavour systems
	Thaumatin	≥95.0% (dry basis)	2,000–3,000 × sucrose, indicative	Beverages · Dairy · Confectionery
	Neohesperidin Dihydrochalcone (NHDC) 98%	≥98.0% (HPLC)	1,500–2,000 × sucrose, indicative	Beverages · Confectionery · Chewing gum
	Monoammonium Glycyrrhizinate 98%	≥98.0% (HPLC)	50–100 × sucrose, indicative	Flavour systems · Confectionery · Beverages
	Dipotassium Glycyrrhizinate 98%	≥98.0% (HPLC)	50–100 × sucrose, indicative	Flavour systems · Oral care · Beverages
	Rubusoside 70%	≥70.0% (HPLC)	100–200 × sucrose, indicative	Beverages · Dairy alternatives · Confectionery
	Glucosylated Steviol Glycosides 90%	≥90.0% (HPLC)	100–200 × sucrose, indicative	Beverages · Dairy alternatives · Tabletop
	Brazzein 90%	≥90.0% (protein basis)	1,000–2,000 × sucrose, indicative for the 90% protein	Beverages · Dairy alternatives · Confectionery
	Monellin 90%	≥90.0% (protein basis)	2,000–3,000 × sucrose, indicative for the 90% protein	Beverages · Dairy alternatives · Confectionery

RANGE	GRADE	PRIMARY SPECIFICATION	SWEETNESS	APPLICATIONS
	Monk Fruit Powder 10%	≥10.0% (HPLC)	10–20 × sucrose, indicative	Beverages · Dairy alternatives · Bakery
High-intensity	Sucralose	98.0–102.0% (HPLC)	400–600 × sucrose, indicative	Beverages · Dairy · Tabletop
	Acesulfame Potassium	99.0–101.0% (HPLC)	180–200 × sucrose, indicative	Beverages · Tabletop · Confectionery
	Aspartame	98.0–102.0% (HPLC)	180–220 × sucrose, indicative	Beverages · Tabletop · Dairy
	Saccharin Sodium (Dihydrate)	99.0–101.0% (HPLC)	300–500 × sucrose, indicative	Tabletop · Beverages · Confectionery
	Neotame	97.0–102.0% (HPLC)	7,000–13,000 × sucrose, indicative	Beverages · Confectionery · Tabletop
	Advantame	97.0–102.0% (HPLC)	20,000 × sucrose, indicative	Beverages · Confectionery · Tabletop
	Sodium Cyclamate	98.0–101.0%	30–50 × sucrose, indicative	Beverages · Tabletop · Confectionery
	Aspartame-Acesulfame Salt (E962)	53.0–57.0% (HPLC)	300–350 × sucrose, indicative	Beverages · Tabletop · Dairy

RANGE	GRADE	PRIMARY SPECIFICATION	SWEETNESS	APPLICATIONS
Polyols	Erythritol	99.0–100.5% (HPLC-RI)	60–70% of sucrose, indicative	Beverages · Confectionery · Tabletop
	Xylitol	98.5–101.0% (HPLC-RI)	90–100% of sucrose, indicative	Chewing gum · Confectionery · Tabletop
	Sorbitol	97.0–101.0% (HPLC-RI)	50–60% of sucrose, indicative	Confectionery · Bakery · Oral care
	Maltitol	98.0–101.0% (HPLC-RI)	90% of sucrose, indicative	Chocolate · Confectionery · Bakery
	Isomalt	≥98.0% (HPLC-RI)	45–60% of sucrose, indicative	Sugar-free hard candy · Tabletop · Bakery
	Mannitol	98.0–101.0% (HPLC-RI)	50–70% of sucrose, indicative	Tabletting · Chewing gum · Bakery
	Lactitol Monohydrate	≥98.0% (HPLC-RI)	30–40% of sucrose, indicative	Sugar-free chocolate · Bakery · Confectionery
	Hydrogenated Starch Hydrolysates (HSH)	≥95.0% (HPLC-RI)	30–50% of sucrose, indicative	Sugar-free candy · Bakery · Ice cream
Rare & functional	Allulose	98.0–102.0% (HPLC-RI)	60–70% of sucrose, indicative	Beverages · Bakery · Frozen desserts
	Tagatose	98.0–102.0% (HPLC-RI)	90% of sucrose, indicative	Beverages · Confectionery · Bakery
	Trehalose Dihydrate	98.0–101.0% (HPLC-RI)	45% of sucrose, indicative	Bakery · Beverages · Protein systems
	L-Arabinose	98.0–101.0% (HPLC-RI)	40–50% of sucrose, indicative	Beverages · Confectionery · Bakery
	D-Xylose	98.0–101.0% (HPLC-RI)	40–50% of sucrose, indicative	Flavour systems · Bakery · Confectionery
	Isomaltulose	≥98.0% (HPLC-RI)	40–50% of sucrose, indicative	Beverages · Bakery · Confectionery
	Crystalline Fructose	≥99.5% (HPLC-RI)	130–180% of sucrose at equal solids, depending on the matrix	Beverages · Bakery · Confectionery

RANGE	GRADE	PRIMARY SPECIFICATION	SWEETNESS	APPLICATIONS
Soluble fibres	Inulin	≥90.0% (HPLC-RI)	10% of sucrose, indicative for standard inulin; higher for oligofructose	Beverages · Dairy · Bakery
	Fructooligosaccharides (FOS)	≥95.0% (HPLC-RI)	30–50% of sucrose, indicative	Beverages · Dairy · Supplements
	Galactooligosaccharides (GOS)	≥70.0% (HPLC-RI)	20–30% of sucrose, indicative	Beverages · Dairy · Supplements
	Xylooligosaccharides (XOS)	≥95.0% (HPLC-RI)	20–30% of sucrose, indicative	Beverages · Supplements · Dairy
	Polydextrose	≥90.0% (HPLC-RI)	Very low, essentially non-sweet; used for bulk and body	Bakery · Confectionery · Beverages
	Resistant Dextrin	≥85.0% (AOAC 2009.01)	10% of sucrose, indicative	Beverages · Supplements · Bakery
	Isomaltooligosaccharide (IMO) 90%	≥90.0% (HPLC-RI)	40–60% of sucrose, indicative	Beverages · Dairy · Bakery
	Stachyose 98%	≥98.0% (HPLC-RI)	20–30% of sucrose, indicative	Beverages · Supplements · Dairy
	Maltooligosaccharide 90%	≥90.0% (HPLC-RI)	40–60% of sucrose, indicative	Beverages · Dairy · Bakery
	Acacia Gum (Gum Arabic)	≥85.0% (AOAC 2009.01)	<5% of sucrose; essentially non-sweet	Beverages · Dairy · Bakery
	Partially Hydrolyzed Guar Gum (PHGG)	≥85.0% (AOAC 2009.01)	<5% of sucrose; essentially non-sweet	Beverages · Dairy · Supplements
	Oat Beta-Glucan 70%	≥70.0% (AOAC 995.16)	Not sweet at use levels	Beverages · Bakery · Dairy
	Pectin (HM/LM)	≥65.0% (dry basis)	Not sweet at use levels	Jams and fruit · Beverages · Confectionery
	Lactulose 70% Syrup	≥70.0% (HPLC-RI)	30–50% of sucrose, indicative	Specialty foods · Supplements · Confectionery
	Soybean Oligosaccharides 60%	≥60.0% (HPLC-RI)	20–30% of sucrose, indicative	Beverages · Supplements · Dairy

RANGE	GRADE	PRIMARY SPECIFICATION	SWEETNESS	APPLICATIONS
	Raffinose 98%	≥98.0% (HPLC-RI)	20–30% of sucrose, indicative	Beverages · Supplements · Dairy
Blends	Stevia-Erythritol Blend 1%	0.9–1.1% (HPLC-UV)	3–5 × sucrose, indicative	Tabletop · Beverages · Dairy alternatives
	Monk Fruit-Erythritol Blend 1%	0.9–1.1% (HPLC)	2–4 × sucrose, indicative	Tabletop · Beverages · Dairy alternatives
	Sucralose-Ace-K Blend 25/75	24.5–25.5% (HPLC)	250–300 × sucrose, indicative	Beverages · Tabletop · Dairy
	Allulose-Stevia Blend 5/95	4.5–5.5% (HPLC-UV)	15–20 × sucrose, indicative	Beverages · Bakery · Dairy alternatives
	Monk Fruit-Allulose Blend 2/98	1.8–2.2% (HPLC)	8–12 × sucrose, indicative	Beverages · Bakery · Dairy alternatives

THE 6 RANGES

Plant-Derived Sweeteners & Sweet Proteins

Plant-derived sweeteners and sweet proteins specified by the exact glycoside, mogroside or protein profile — because a stevia leaf, a Reb A powder, a Reb M grade and a brazzein protein are four different ingredients with four different taste curves.

High-Intensity Sweeteners

Sucralose, acesulfame K, aspartame, saccharin, neotame and advantame, specified by assay, related substances and the physical form that matches the process.

Polyols & Sugar Alcohols

Erythritol, xylitol, sorbitol, maltitol, isomalt and mannitol specified by assay, moisture, particle size and the crystallisation behaviour that decides whether a sugar-free sweet will set.

Rare & Functional Sugars

Low-abundance sugars where the physical properties are useful, and the sweetness curve, browning behaviour and process stability all need to be checked before scale-up.

Soluble Fibres & Prebiotic Carbohydrates

Soluble fibres specified by fibre content, polymer distribution, sweetness and the viscosity they build — the four figures that decide whether a fibre works in a drink, a bar or a bakery item.

Sweetener Blends & Systems

Standard blends that combine a high-intensity sweetener with a bulk carrier or a second sweetener, so the sweetness curve, the body and the use level arrive together.

WHAT TO SEND FOR A TRIAL

- The target sucrose equivalence and the application.
- The pH, heat process and other sweeteners in the formula.
- The quantity, pack and destination market.
- Any flavour, colour or mouthfeel constraint.
- The document pack your quality team needs.

> **Sweetness is not a constant.** The figures in this guide are indicative and matrix-dependent. Compare grades at equal delivered sweetness, in the real matrix, before fixing the formula. The specification and the batch COA govern the order.

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