



galenIQ™ – Sweet tasting filler-binder
Great choice. Great taste.

Isomalt (Ph. Eur., BP, USP-NF, JP)

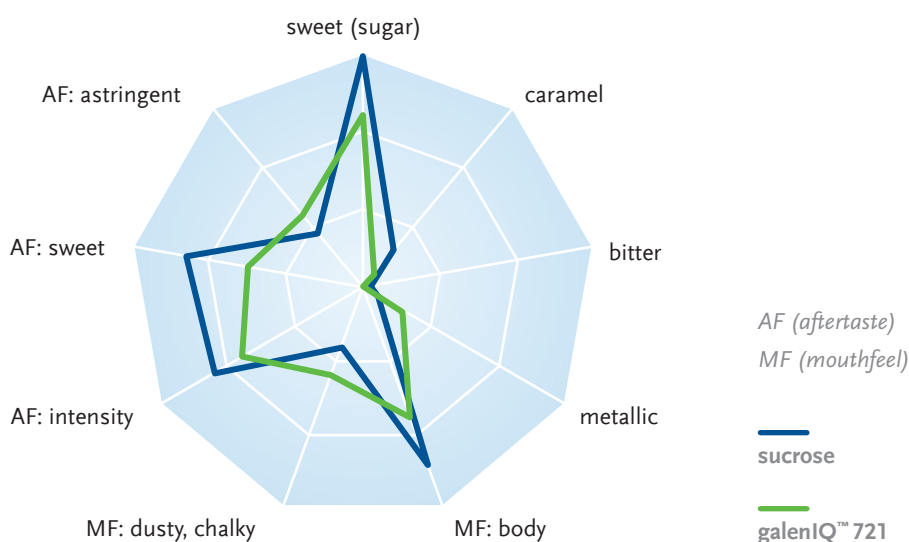
galenIQ™
a brand of beneo

galenIQ™ – the sweet pharmaceutical excipient.

galenIQ™ has a sugar-like taste profile.

The galenIQ™ taste profile is very close to sucrose, it has an intense and well-balanced sweet taste. galenIQ™ provides a pleasant mouthfeel for chewable tablets, suckable tablets, stick packs and many more dosage forms.

Isomalt is the only sugar alcohol that is derived from sucrose. It is mainly due to this reason that galenIQ™ has a sweetness and taste profile very close to sucrose. Isomalt does not have any significant off-taste or aftertaste.



Good reasons for galenIQ™

Non-hygroscopic

Promotes high content uniformity

High flowability

Sugar-free

Tooth friendly

Chemically stable

Easy to use

Water soluble

High dilution potential

Suitable for diabetics

Well defined particle size distributions

Different solubilities for different disintegration profiles

Non animal origin – derived from sugar beet

galenIQ™ has a great taste and an excellent functionality.

galenIQ™ is characterized by its ease of use and applicability to a great variety of solid and liquid dosage forms such as tablets, sachets, lozenges and syrups.

The excipient of choice for



Chewable Tablet



Sachet / Stick Pack



Powder Blend



Lozenge Tablet



Probiotic Tablet



Mini Tablet



Effervescent Tablet



Wet Granulation



High Boiled Lozenge



Oil Carrier



Pan Coating



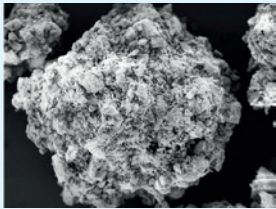
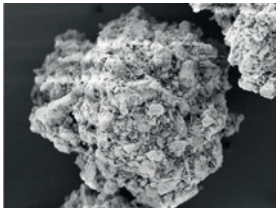
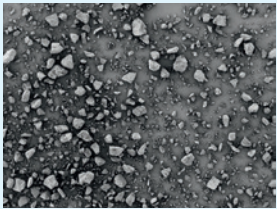
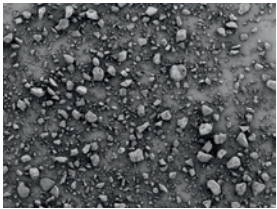
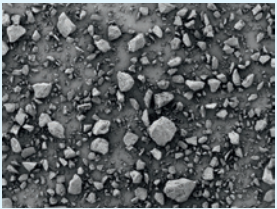
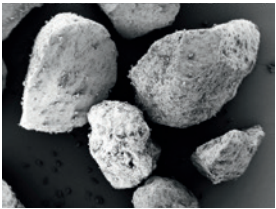
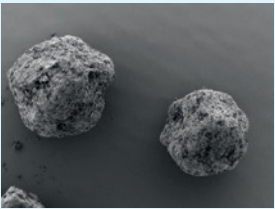
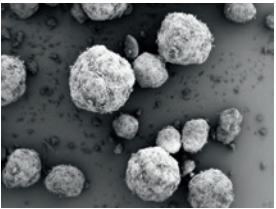
Syrup

You can use galenIQ™ for many more applications.
Our experts are keen to assist you, please get in touch with us.

Great choice. Great taste.

galenIQ™ Isomalt (Ph. Eur., BP, USP-NF, JP) is designed to meet the very specific expectations of the pharmaceutical industry. It is a filler-binder, that combines a multitude of outstanding characteristics, suitable for a wide range of pharmaceutical applications.

Physical properties* of galenIQ™

	galenIQ™ 720			galenIQ™ 721			galenIQ™ 800			galenIQ™ 801			galenIQ™ 810			galenIQ™ 900			galenIQ™ 960			galenIQ™ 981		
Grade	agglomerated			agglomerated			milled			milled			milled			sieved			sieved			sieved		
Preferred application	direct compression			direct compression, powder blend			wet granulation, agglomeration			wet granulation, agglomeration			wet granulation, agglomeration			high-boiled lozenge			capsule filling, dry blend, HME			pan coating, syrup		
Composition GPS/GPM	1:1			3:1			1:1			3:1			1:1			1:1			1:1			3:1		
																								
Solubility in water at 20 °C (g/100 g)	25			42			25			42			25			25			25			42		
Particle size distribution (µm)	d ₁₀ 95	d ₅₀ 200	d ₉₀ 350	d ₁₀ 90	d ₅₀ 180	d ₉₀ 360	d ₁₀ 9	d ₅₀ 22	d ₉₀ 41	d ₁₀ 11	d ₅₀ 24	d ₉₀ 45	d ₁₀ 5	d ₅₀ 28	d ₉₀ 80	d ₁₀ 560	d ₅₀ 1240	d ₉₀ 1910	d ₁₀ 270	d ₅₀ 380	d ₉₀ 470	d ₁₀ 340	d ₅₀ 770	d ₉₀ 1290
Method	mechanical sieve shaker			mechanical sieve shaker			laser diffraction			laser diffraction			laser diffraction			mechanical sieve shaker			mechanical sieve shaker			mechanical sieve shaker		
Bulk density (g/l)	400			400			500			500			590			850			820			780		
Total water K. F. (%)	5,0			2,9			2,7			2,6			3,0						2,3			2,8		
Loss on drying (%) (10 ⁵ pa, 7 h at 25 °C)	0,21			0,12			0,26			0,21			0,42						0,12			0,02		

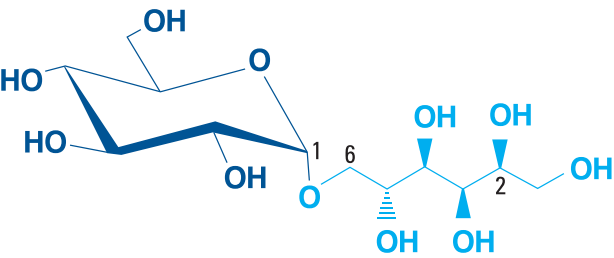
* This information on average values is presented in good faith, but warranty to accuracy of results is not given. It is offered solely for your consideration, investigation and verification. Typical analysis data fall within the range of specification of galenIQ™.

Physical properties of galenIQ™ DC grades*

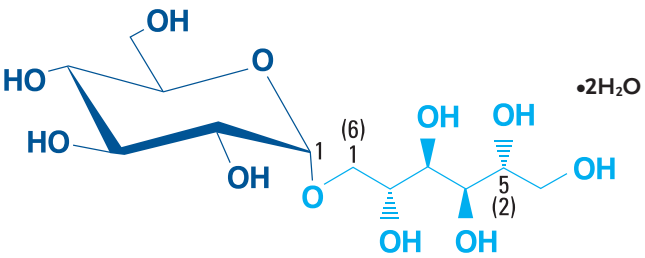
	galenIQ™ 720	galenIQ™ 721
Tapped density (g/l) n = 1250	448	448
Hausner ratio	1,12	1,12
Carr index	10	10
Angle of repose (°)	33	31
Flowability (s/100 g) (orifice d = 6 mm)	55	57

Structural formula of Isomalt

galenIQ™ is produced from sucrose derived from sugar beet.



6-0-α-D-Glucopyranosyl-D-sorbitol (1,6-GPS)



1-0-α-D-Glucopyranosyl-D-mannitol dihydrate (1,1-GPM)

Monograph of Isomalt

	Ph.Eur.	USP-NF	JP
Definition	Isomalt contains not less than 98.0 % and not more than 102.0 % of a mixture of 6-O- α -D-glucopyranosyl-D-sorbitol (1,6-GPS) and 1-O- α -D-glucopyranosyl-D-mannitol dihydrate (1,1-GPM), and neither of the two components is less than 3.0 % of the mixture, calculated on the anhydrous basis.		
Characterisation/Description	A white or almost white powder or granules, freely soluble in water, practically insoluble in ethanol	not applicable	Isomalt Hydrate occurs as a white powder or grains. It is freely soluble in water and practically insoluble in ethanol
Packaging and storage	not applicable	Preserve in well-closed containers. No storage requirements specified	Preserve in well-closed containers
Labelling	The percentage of 1,6-GPS and 1,1-GPM is stated on the label		
Reference standard	Isomalt CRS	USP Isomalt RS	Isomalt RS
Identification	A = HPLC assay B = TLC test C = Color test	A = TLC test B = HPLC assay	A = Colour test B = HPLC
Optical rotation	—	—	about +92°
Conductivity	$\leq 20 \mu\text{S/cm}$	$\leq 20 \mu\text{S/cm}$	$\leq 20 \mu\text{S/cm}$
Water	$\leq 7.0 \%$	$\leq 7.0 \%$	$\leq 7.0 \%$
Nickel	$\leq 1 \text{ ppm}$	$\leq 1 \text{ ppm}$	$\leq 1 \text{ ppm}$
Lead	$\leq 0.5 \text{ ppm}$	not applicable	not applicable
Heavy metals	not applicable	not applicable	$\leq 10 \text{ ppm}$
Reducing sugars	$\leq 0.3 \%$	$\leq 0.3 \%$	$\leq 0.3 \%$
Assay	98.0 – 102.0 %	98.0 – 102.0 %	98.0 – 102.0 %
Related products/compounds	Sorbitol $\leq 0.5 \%$ Mannitol $\leq 0.5 \%$ any other unspecified impurity $\leq 0.5 \%$ Sum of all $\leq 2.0 \%$	Sorbitol $\leq 0.5 \%$ Mannitol $\leq 0.5 \%$ any other unspecified impurity $\leq 0.5 \%$ Sum of all $\leq 2.0 \%$	Sorbitol $\leq 0.5 \%$ Mannitol $\leq 0.5 \%$ any other unspecified impurity $\leq 0.5 \%$ Sum of all $\leq 2.0 \%$
Impurities	A = Isomaltulose B = Mannitol C = Sorbitol D = Trehalulose	not applicable	not applicable

BENEO is a member of the International Pharmaceutical Excipients Council (IPEC) and produces galenIQ™ under GMP conditions for pharmaceutical excipients. Whether tablet or capsule, lozenge, chewing gum or syrup, galenIQ™ opens entirely new doors to the development of innovative pharmaceutical products.

Contact one of our experts today for your product development with galenIQ™.

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Find us on:   

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a brand of beneo