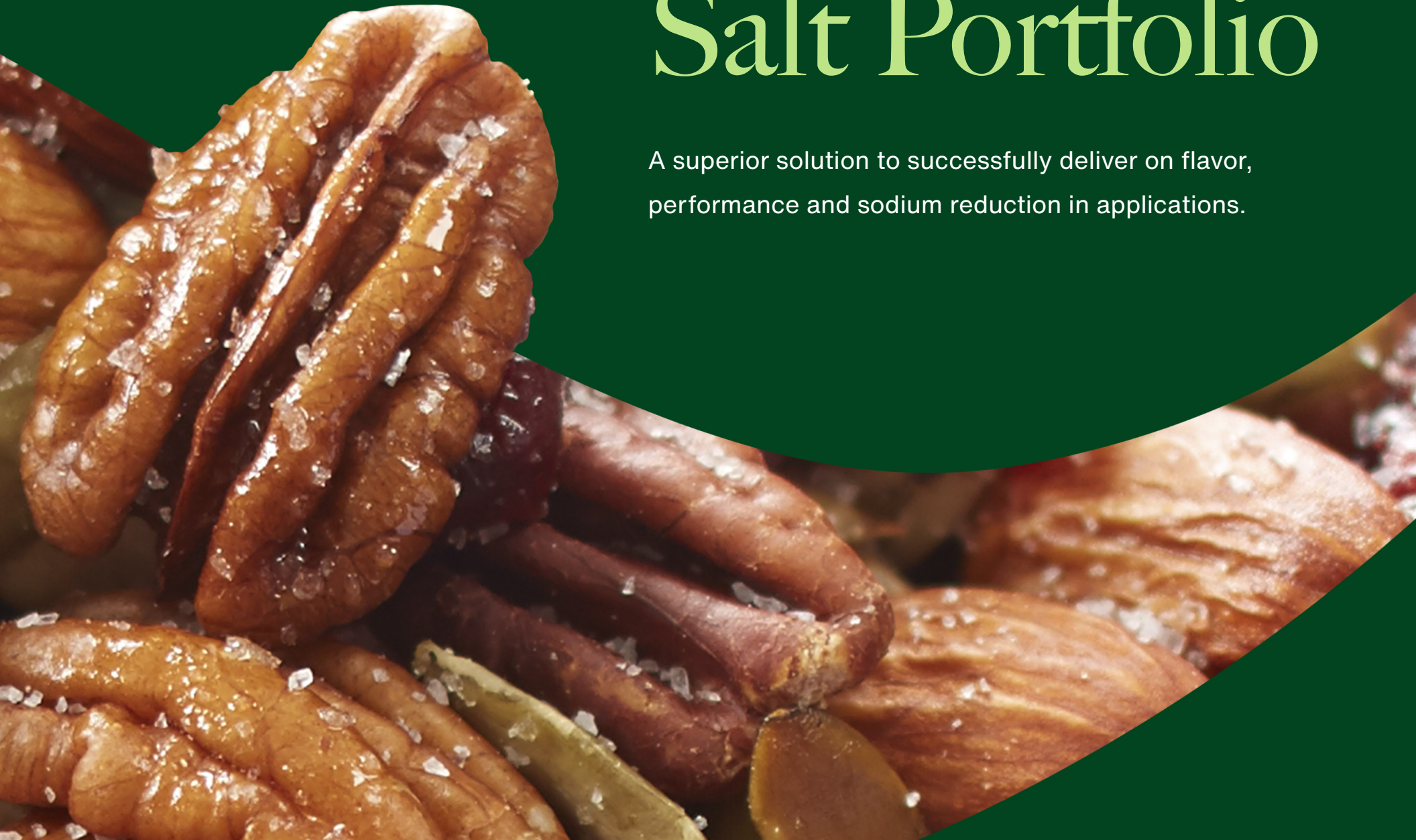




Alberger® Salt Portfolio

A superior solution to successfully deliver on flavor,
performance and sodium reduction in applications.



Where flavor, performance and sodium reduction in application take shape



Deliver a consistent sensory experience with the performance benefits of Alberger® Salt.

The unique crystalline shape of Alberger® Salt gives you increased surface area and lower bulk density than granulated salt.

It dissolves faster than granulated salt, delivering a strong salty flavor burst in topical applications. While its low bulk density, rough surface and consistent particle size ensure even blendability in product formulation.

This means you can achieve the flavor and function you demand from your formulations while also lowering the sodium content by using less salt.

See your flavor, performance and sodium reduction goals take shape with the superior solution: Alberger® Salt.

Benefits that bring value

Flavor

The unique shape of Alberger® Salt allows for optimal blendability, solubility and adherence helping you to easily develop a product that delivers the delicious salty burst of flavor your customers crave.

Performance

Alberger® Salt provides optimal function in formulas, compared to granulated salt, too!

Superior Adherence

For more consistent and amplified flavor as well as reduced waste in topical applications.

Rapid Dissolution

Enabling protein extraction for meat binding and texture enhancement, gluten formation in doughs and flavor and browning development in baked goods, plus more efficient processing overall.

Consistent Blendability

For stable and consistent integration in dry mixes.

Sodium Reduction in Applications

Alberger® Salt's lower bulk density helps you reduce sodium, compared to granulated salt, by decreasing the salt by volume in formulation without sacrificing flavor or performance:

Bakery

Up to 20% sodium reduction* in cookies and 25% in bread compared to granulated salt.

Snacks

Up to 20% sodium reduction* in topical and dough applications compared to granulated salt.

Ready Meals

Up to 20% sodium reduction* in pot-pie fillings compared to granulated salt.

Sauces & Condiments

Up to 10% sodium reduction* in sauces and 15% in gravies compared to granulated salt.

**Results based on internal Cargill research and may vary.*

The Alberger Process

Alberger® Salt is made through an open-pan evaporation process. This produces salt more slowly, allowing unique shapes of salt crystals to form. The shape of the salt crystals gives Alberger® Salt its unique characteristics. With a large surface area and lower bulk density, our salt offers a measurable advantage in terms of blendability, adherence, dissolution and absorption, compared to granulated salt.



A solution for every category

With our proprietary process, Alberger® Salt has the performance, flavor and sodium reduction capabilities that can help elevate your applications. From bakery and snacks, to seasonings, dairy and processed meat, our portfolio of salts has your category covered.



Your next ingredient is here

The right salt adds the right features and benefits. The difference between Alberger® Coarse, Flake, Fine Flake and Flour Salt is driven by particle size and cut, which directly impacts bulk density, adherence, dissolution and best-fit applications.



Coarse



Flake



Fine Flake



Flour

Alberger® Coarse Salt

Features and Benefits

Flavor

- Faster dissolution than granulated salt to help deliver a delicious salty burst of flavor that customers crave.

Performance

- Faster dissolution than granulated salt to improve processing performance in cheese and meat applications by enabling better moisture control and more consistent texture development.
- Low bulk density and rough surface that helps grab seasonings in blends to provide a more uniform and consistent blend.
- Particle structure that creates a visually fuller, more evenly distributed appearance seasoning blends compared to granulated salt.

* Sodium reduction may vary by application



	Adherence* (wt. % retained)	Bulk Density* (g/L)	Dissolution Rate (s-1)
Granulated Salt (evaporated)	73%	1215	0.024
Alberger® Coarse Salt	62%	590	0.038
		-51% lower bulk density	1.6x faster dissolution

Bulk density is the salt crystal's weight by volume.

First Order Rate (s-1) = how fast something dissolves based on how much is still left to dissolve capturing full dissolving behavior.

* Data is directional. Testing done internal to Cargill on specific applications. Results may vary.

Alberger® Coarse Salt



Categories

Seasonings
Bakery
Snacks
Cheese
Meat

Optional Additives

Additive-Free

Alberger® Flake Salt

Features and Benefits

Flavor

- Faster dissolution that enhances flavor distribution in wet systems like dressings, sauces and condiments compared to granulated salt.
- Faster dissolution that enhances salty impact with a salty burst in topical applications like snacks compared to granulated salt.

Performance

- Improved adherence in topical applications such as snacks, delivering more consistent coverage for dependable flavor delivery and reduced ingredient waste compared to granulated salt.
- Low bulk density for consistent blendability and rough surface that helps grab seasonings in blends combine to provide a more stable, uniform seasoning and dry mix blend compared to granulated salt.

Sodium Reduction in Application*

- Faster dissolution to boost salty perception, so you can achieve the same great taste by using less salt compared to granulated salt. Depending on goals, you may achieve reduction in sodium without changing your ingredient statement.

* Sodium reduction may vary by application



	Adherence* (wt. % retained)	Bulk Density* (g/L)	Dissolution Rate (s-l)
Granulated Salt (evaporated)	73%	1215	0.024
Alberger® Flake Salt	83%	720	0.043
	14% increased adherence	-41% lower bulk density	1.8x faster dissolution

Bulk density is the salt crystal's weight by volume.

First Order Rate (s-l) = how fast something dissolves based on how much is still left to dissolve capturing full dissolving behavior.

* Data is directional. Testing done internal to Cargill on specific applications. Results may vary.

Alberger® Flake Salt



Categories

Seasonings
Snacks
Dressing, Sauces
and Condiments
Bakery
Confectionery
Dairy
Meat
Canning

Optional Additives

Additive-Free

Alberger® Fine Flake Salt

Features and Benefits

Flavor

- Faster dissolution to help deliver a clean, impactful salty burst of flavor in snack applications compared to granulated salt.
- Faster dissolution that enhances flavor distribution in wet systems like dressings, sauces and condiments compared to granulated salt.

Performance

- Faster dissolution for protein extraction, binding and texture development and help improving overall mix time in fresh meat systems compared to granulated salt.
- Faster dissolution that supports gluten development and browning in baked good applications compared to granulated salt.
- Improved adherence in topical applications such as snack seasoning blends, delivering more consistent coverage for consistent flavor delivery and reduce waste compared to granulated salt.
- Uniform dispersion in bakery applications such as dough systems and dry mixes with its consistent particle size.

Sodium Reduction in Application*

- Faster dissolution to boost salty perception, so you can achieve the same great taste by using less salt compared to granulated salt. Depending on goals, you may achieve reduction in sodium without changing your ingredient statement.

* Sodium reduction may vary by application



	Adherence* (wt. % retained)	Bulk Density* (g/L)	Dissolution Rate (s-1)
Granulated Salt (evaporated)	73%	1215	0.024
Alberger® Flour Salt	96%	865	0.083
	+32% increased adherence	-29% lower bulk density	3.5x faster dissolution

Bulk density is the salt crystal's weight by volume.

First Order Rate (s-1) = how fast something dissolves based on how much is still left to dissolve capturing full dissolving behavior.

* Data is directional. Testing done internal to Cargill on specific applications. Results may vary.

Alberger® Fine Flake Salt



Categories

Bakery	Snacks	Seasonings
Dressing, Sauces and Condiments	Cereal	Confectionery
Meat (Fresh Sausage)	Ready Meals	Dairy

Optional Additives

Additive-Free

Fine Flake Iodized Additive Package

- Improves caking resistance
- Contains iodine, TCP
and SD

Shur-Flo® Fine Flake Additive Package

- Improves caking resistance,
dust control and free-flowing
agent
- Contains YPS, SS and glycerin

Fine Flake Supreme Additive Package

- Improves dust control and
free-flowing agent
- Contains YPS and glycerin

Fine Flake Improved Additive Package

- Improves dust control
and free-flowing agent
- Contains PG

Fine Flake Prepared Additive Package

- Improves dust control
and free-flowing agent
- Contains TCP

Alberger® Flour Salt

Features and Benefits

Flavor

- Faster dissolution to deliver a delicious, salty burst of flavor in topical applications compared to granulated salt.
- Reduced undissolved particles compared to granulated salt, ensuring even flavor distribution in wet systems like dressing, sauces and condiments.

Performance

- Improved adherence in topical applications to deliver a uniform flavor experience and reduce fallout waste compared to granulated salt.
- Faster dissolution that supports gluten development and browning in baked good applications compared to granulated salt.
- Consistent particle size for superior blendability, helping reduce flavor variability and uniform dispersion in topical seasoning mixes and extrusion dough systems compared to granulated salt.

Sodium Reduction in Application*

- Faster dissolution to boost salty perception, so you can achieve the same great taste by using less salt compared to granulated salt. Depending on goals, you may achieve reduction in sodium without changing your ingredient statement.

* Sodium reduction may vary by application



	Adherence* (wt. % retained)	Bulk Density* (g/L)	Dissolution Rate (s-1)
Granulated Salt (evaporated)	73%	1215	0.024
Alberger® Flour Salt	99%	960	0.143
	+36% increased adherence	-21% lower bulk density	6x faster dissolution

Bulk density is the salt crystal's weight by volume.

First Order Rate (s-1) = how fast something dissolves based on how much is still left to dissolve capturing full dissolving behavior.

* Data is directional. Testing done internal to Cargill on specific applications. Results may vary.

Alberger® Flour Salt



Categories

Snacks	Ready Meals	Confectionery
Seasonings	Dressing, Sauces and Condiments	Dairy
Bakery	Meat	Canning
Cereal		

Optional Additives

Additive-Free

Shur-Flo® Fine Flour Additive Package

- Improves caking resistance, dust control and free-flowing agent
- Contains YPS, SS, and glycerin

Fine Prepared Flour Additive Package

- Improves free-flowing agent
- Contains TCP

Find the salt ingredient that best fits your needs

	Bakery	Snacks	Cereal	Ready Meals	Cooking Ingredients: Seasonings	Cooking Ingredients: Dressing, Sauces, Condiments	Confectionery	Dairy / Dairy Alternatives	Meat (Whole Muscle)	Meat (Processed)	Canning
Alberger® Coarse	✓	✓			✓			✓	✓		
Alberger® Flake	✓	✓			✓	✓	✓	✓		✓	✓
Alberger® Fine Flake	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
Alberger® Flour	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓

Create successful food & beverage products with Cargill

From custom formulation and ingredient training to hands-on troubleshooting and practical tools, our capabilities can help bring your product vision to life. With trusted ingredients like Alberger® Salt, you can turn your concepts into products that perform.

Learn more about the
opportunity with Alberger® Salt.

Contact your Cargill representative
or visit cargill.com/alberger-salt

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