

FDF Salt reduction supplier database

Reformulation is a growing priority for manufacturers navigating market trends, as health grows as a priority in consumer purchasing. Nutritional guidance and legislation are also driving reformulation, including the following frameworks focussed on salt reduction:

- 2024 Salt reduction targets
[View full document](#)
[View our summary sheets](#)
- [Promotion restrictions for products deemed High in Fat, Sugar and Salt \(HFSS\)](#)
- [Front-of-pack nutritional labelling](#)

The Food and Drink Federation Scotland Reformulation for Health's programme has developed this database to help food and drink manufacturers source ingredients that can be used to achieve sodium reduction. The list acts as a signposting resource only, and quality checks remain the responsibility of the manufacturer prior to use. If you produce or supply a product that you would like included in this resource, or if you would like to update any of the information, please contact reformulation@fdfscotland.org.uk

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Helping food businesses

REFORMUL
for a healthier future



Brusco Food Group (UK Distributor)

Helen Mitchell, Director of Science, Smart Salt Oy: helen.mitchell@smartsalt.fi

Andrew Ashby, Managing Director, Brusco Food Group: andrew.ashby@brusco.co.uk

Sodium Reduction: Smart Salt® - Brusco Food Group

Smart Salt® sodium reduction technology is based on minerals salts: magnesium chloride and potassium chloride. Various product options are available.

What does it replace?

Replaces added salt in foods

What level of salt/sodium reduction can be achieved using this ingredient?

Can replace up to 60% salt

What functionality does it have in the recipe?

Provides salty taste, preservation, and handling properties just like salt. In some cases, the preservation characteristics of foods are improved

Already in products on the market in the UK, EU, or elsewhere?

Yes, already used commercially in UK, Norway and EU

Formats available (powder/paste/liquid)

Crystalline salt mixtures

Effect on product's shelf life?

When used as a 1:1 replacement for added salt there is no change in shelf-life. In some cases there is an improved shelf-life and microbiological standard

Is it allergenic?

No known allergens added

Any regulatory limitations such as 'novel food' classification?

No

When and how is the ingredient added?

Use as you would regular salt

Different cooking temperatures or times?

Use as you would regular salt

Is there a maximum level of ingredient permitted per application?

No restrictions for use levels

Effect on taste / consumer acceptability?

Tastes like salt. Extensive consumer trials have indicated excellent consumer acceptability and often positive flavour enhancement in a wide range of applications

No Any long-term health effects?

No. Salt substitutes based on potassium chloride and magnesium chloride have been shown in clinical trials to reduce both systolic and diastolic blood pressure. There are positive health benefits for using salt substitutes

Declaration on the label

Reduced sodium salt or Salt, Mineral Salts (Potassium Chloride, Magnesium Chloride) or Salt, Potassium Chloride, Magnesium Chloride

Storage requirements

As per salt. Cool dry environment. Re-seal opened bags.

Any COSHH implications for use in manufacturing / is PPE needed for handling or storage conditions?

No COSHH or PPE requirements

Any ethical/environmental considerations for sourcing?

None that we are aware of

Does the manufacturing site have standard certifications such as BRC?

Yes

Foodology by Univar Solutions (UK Supplier)

Derek Wynne, Key Account Manager

Derek.wynne@univarsolutions.com

www.univarsolutions.com

NSF 14 (Natural Stevia Flavouring)

What does it replace?

Salt

What level of salt/sodium reduction can be achieved using this ingredient?

This will have to be trial and error. This is a natural flavouring that can enhance salty notes in a product when salt is reduced. There is a legal limit on dosage depending on the application.

What functionality does it have in the recipe?

Will only enhance taste. It enhances the salty and savoury notes

Already in products on the market in the UK, EU, or elsewhere?

Yes

Formats available (powder/paste/liquid)

Powder

Effect on product's shelf life?

No effect. If salt is removed, the shelf life will be effected so shelf life studies will need t be completed

Is it allergenic?

No

Any regulatory limitations such as 'novel food' classification?

No

When and how is the ingredient added?

Add with other dry ingredients to help dispersion but not essential

Different cooking temperatures or times?

No

Is there a maximum level of ingredient permitted per application?

Yes. This will be determined by the steviol equivalent allowed in that application. Your Technical manager will support you with this dosage

Effect on taste / consumer acceptability?

Positive

Any long-term health effects?

No

Declaration on the label

Natural Flavouring

Storage requirements

Dry, Cool Environment

Any COSHH implications for use in manufacturing / is PPE needed for handling or storage conditions?

No

Any ethical/environmental considerations for sourcing?

No

Does the manufacturing site have standard certifications such as BRC?

Yes

<p>Healy Group; exclusive UK & Ireland agent/distributor for Saltwell</p> <p>Samual Bambrough, Specialities - Business Development Manager: sbambrough@healy-group.com</p> <p>www.healy-group.com</p> <p>www.saltwellsalt.com</p>
<p>Saltwell is a natural sea salt from the Atacama Desert in Chile which unique to that source has 35% less sodium. As a result, Saltwell can replace regular salt in a simple weight for weight switch reduced added sodium by 35% whilst also maintaining flavour, functionality, and labelling.</p>
<p>What does it replace?</p>
<p>PDV Salt, Sea Salt, etc.</p>
<p>What level of salt/sodium reduction can be achieved using this ingredient?</p>
<p>Up to 35%.</p>
<p>What functionality does it have in the recipe?</p>
<p>Like for like against regular salt. For example, in applications where salt has a function as well as flavour such as bakery and meat, Saltwell provides similar functionality.</p>
<p>Already in products on the market in the UK, EU, or elsewhere?</p>
<p>Yes, used thoroughly throughout the UK, rest of Europe and the USA already. Examples can be provided on request.</p>
<p>Formats available (powder/paste/liquid)</p>
<p>Salt (powder)</p>
<p>Effect on product's shelf life?</p>
<p>Like for like against regular salt.</p>
<p>Is it allergenic?</p>
<p>No</p>
<p>Any regulatory limitations such as 'novel food' classification?</p>
<p>No</p>
<p>When and how is the ingredient added?</p>
<p>Used in the same way as regular salt making it easy to adopt into processes and speeding up NPD time.</p>
<p>Different cooking temperatures or times?</p>
<p>No different to regular salt.</p>
<p>Is there a maximum level of ingredient permitted per application?</p>
<p>No</p>
<p>Effect on taste / consumer acceptability?</p>
<p>We've conducted several taste panels comparing Saltwell to regular salt with the overwhelming opinion being that it tastes very similar to regular salt. In some cases, we've received feedback that Saltwell tastes even saltier than regular salt.</p>
<p>No Any long-term health effects?</p>
<p>None.</p>
<p>Declaration on the label</p>
<p>"Salt", "Sea Salt", "Reduced Sodium Salt" or "Reduced Sodium Sea Salt".</p> <p>Some UK customers/food manufacturers have taken their own interpretations and labelled as "Mineral Sea Salt", "Low Sodium Sea Salt" or "Natural Sea Salt".</p>
<p>Storage requirements</p>
<p>Keep ambient and away from moisture. As salt is hygroscopic it can be prone to clumping once the bag is open.</p>
<p>Any COSHH implications for use in manufacturing / is PPE needed for handling or storage conditions?</p>
<p>None.</p>
<p>Any ethical/environmental considerations for sourcing?</p>
<p>Sustainability statement attached and can provided on request for further detail.</p>
<p>Does the manufacturing site have standard certifications such as BRC?</p>
<p>Yes, the cleaning and packing facility is BRC certified.</p>

JPL Flavour Technologies Ltd (UK manufacturer)
 Jake Lavelle, Managing Director: jakelavelle@jpl-flavours.com
 www.jpl-flavours.com

Salt Modulator

What does it replace?

It helps reduce salt by around 20% without sacrificing on taste

What level of salt/sodium reduction can be achieved using this ingredient?

20% is the average however it varies from application to application

What functionality does it have in the recipe?

It helps enhance the taste and the umami notes that are usually lost in lower salt products

Already in products on the market in the UK, EU, or elsewhere?

Yes UK product

Formats available (powder/paste/liquid)

Powder

Effect on product's shelf life?

None

Is it allergenic?

No

Any regulatory limitations such as 'novel food' classification?

No

When and how is the ingredient added?

As Salt would be added in a recipe

Different cooking temperatures or times?

No

Is there a maximum level of ingredient permitted per application?

No – Quantum satis on this one

Effect on taste / consumer acceptability?

The modulator helps make a 20% reduced salt product taste very similar to a full salt product

Any long-term health effects?

No

Declaration on the label

Natural Flavouring

Storage requirements

Room temp, out of direct sunlight

Any COSHH implications for use in manufacturing / is PPE needed for handling or storage conditions?

No

Any ethical/environmental considerations for sourcing?

No

Does the manufacturing site have standard certifications such as BRC?

Yes BRC grade AA

<p>Klinge Foods Ltd.: UK based producers of LoSalt®</p> <p>Caroline Klinge, Technical Sales and Marketing Director: c.klinge@losalt.com</p> <p>Mike Lloyd, Business Development Manager: m.lloyd@losalt.com</p>
LoSalt®: reduced sodium salt with 66% less sodium
What does it replace?
LoSalt® replaces salt 1:1
What level of salt/sodium reduction can be achieved using this ingredient?
66% salt/sodium reduction
What functionality does it replace?
No loss in functionality or taste as compared to regular salts
Already in products on the market in the UK, EU, or elsewhere?
Yes
Formats available (powder/paste/liquid)
Granular, free-flow product
Effect on product's shelf life?
No difference to shelf life
Effect on a product's safety (ie allergenic)?
No effect on product safety (no allergens present)
Any regulatory limitations such as 'novel food' classification?
No regulatory limitations
When and how is the ingredient added?
Use as you would use salt
Different cooking temperatures or times?
No revision for processing required
Is there a maximum level of ingredient permitted per application?
n/a
Effect on taste / consumer acceptability?
No difference in consumer acceptability
No Any long-term health effects?
No long-term health effects
Declaration on the label
<p>Where the anti-caking function is no longer performed by Magnesium Carbonate:</p> <ul style="list-style-type: none"> LoSalt® Reduced Sodium Salt (Potassium Chloride, Salt) <p>OR</p> <ul style="list-style-type: none"> LoSalt® Reduced Sodium Salt (Potassium Chloride, Sodium Chloride) <p>Note 1:</p> <p>Magnesium Carbonate may be included on a voluntary basis.</p> <p>In a food where the anti-caking function still is performed:</p> <ul style="list-style-type: none"> LoSalt® Reduced Sodium Salt (Potassium Chloride, Salt, Anti-caking agent (E 504)) <p>OR</p> <ul style="list-style-type: none"> LoSalt® Reduced Sodium Salt (Potassium Chloride, Salt, Anti-caking agent: (Magnesium Carbonate)) <p>Note 2:</p> <p>Ingredients are listed in descending order of weight as added at the mixing bowl stage. The declared ingredients listing format is in line with best practice guidance.</p> <p>Note 3:</p> <p>Salt and Sodium chloride can be used interchangeably within the ingredients listing.</p>
Storage requirements
Ambient
Any COSHH implications for use in manufacturing / is PPE needed for handling or storage conditions?
None
Any ethical/environmental considerations for sourcing?
None

Mediterranean Umami Bold from Salt of the Earth:

100% clean label ingredient which uses a unique combination of:
sea-salt, tomato concentrate, mushroom and seaweed extracts.

- Substantial sodium reduction -Up to 45%
- Clean label and all-natural solution
- Retain savoury flavour profile
- Applicable to a broad variety of products

What does it replace?

Sodium (salt) and potentially sugar in certain applications

What level of salt/sodium reduction can be achieved using this ingredient?

Up to 45% sodium reduction possible in various applications

What functionality does it have in the recipe?

Use in savoury food applications to enhance flavours and salty taste. Help to reduce salt content in foods by up to 45%. The ingredient does not require thermal treatment.

Sugar reduction is also possible in certain applications.

Already in products on the market in the UK, EU, or elsewhere?

Yes

Formats available (powder/paste/liquid)

Liquid form only at the moment – spray dried version in development

Effect on product's shelf life?

Low impact

Is it allergenic?

None

Any regulatory limitations such as 'novel food' classification?

None

When and how is the ingredient added?

In liquid phase

Different cooking temperatures or times?

No thermal treatment required / stable in high cooking temperatures.

Is there a maximum level of ingredient permitted per application?

Depends on original salt level of the food formulation.

Generally: 0.4-3%

Effect on taste / consumer acceptability?

Significant sodium reduction with same sensory taste profile.

No Any long-term health effects?

None

Declaration on the label

Natural flavours, water, sea-salt

Storage requirements

ambient temperature for 18 months

Any COSHH implications for use in manufacturing / is PPE needed for handling or storage conditions?

None

Any ethical/environmental considerations for sourcing?

None

Does the manufacturing site have standard certifications such as BRC?

Yes

Microsalt plc is the manufacturer of MicroSalt.
 Susan Gregory, UK Manager, sgregory@microsaltinc.com
www.microsaltinc.com

MicroSalt uses patented technology to achieve the same saltiness of traditional salt with half the sodium. They do this by reducing the salt particle size to 100x smaller than standard.

Due to the micron sized particles, MicroSalt® dissolves almost immediately, and our taste buds recognize it as over twice as salty as regular salt, so we consume less sodium to get the same salty taste.

Tastes exactly like salt. No added substitutes, no potassium chloride, no bitter aftertaste. Natural. Non-GMO. Gluten Free.

Ideal for many applications including breads, biscuits, pizza dough and other bakery items, crisps/tortilla chips/popcorn, french fries, spreads (butter/peanut butter) and cheeses, sauces, soups, prepared pasta and ready meals and any other food that uses salt.

What does it replace?

Salt

What level of salt/sodium reduction can be achieved using this ingredient?

It always depends on the application but we generally expect 40-50% reduction in sodium.

What functionality does it have in the recipe?

It depends on the application. Some baked goods have seen additional benefits such as a 20% reduction in cooking time, 15% reduction in yeast requirements, 10% faster browning time.

Already in products on the market in the UK, EU, or elsewhere?

USA, Mexico, Canada, UK, Singapore. Samples available on request.

Formats available (powder/paste/liquid)

20kg bags (MicroSalt powder)

Effect on product's shelf life?

None – MicroSalt has a five year shelf life

Is it allergenic?

No

Any regulatory limitations such as 'novel food' classification?

No

When and how is the ingredient added?

Generally used in the same way as salt but can depend on the application.

Different cooking temperatures or times?

Not usually but some applications have resulted in shorter cooking times.

Is there a maximum level of ingredient permitted per application?

No

Effect on taste / consumer acceptability?

None

Any long-term health effects?

None

Declaration on the label

Due to the tiny crystal size, MicroSalt requires a carrier agent. This is usually maltodextrin but can also be corn starch, tapioca or other agent as preferred. MicroSalt is declared as salt on the label. Reference to the carrier agent is at the customer's discretion.

Storage requirements

Same as salt

Any COSHH implications for use in manufacturing / is PPE needed for handling or storage conditions?

No

Any ethical/environmental considerations for sourcing?

No

Does the manufacturing site have standard certifications such as BRC?

Yes

Peacock Salt
Dr Dzeti Zait, Technical Sales Manager: dzeti.zait@peacocksalt.co.uk
Peacock Salt - UK Salt Suppliers.
www.thesaltsmith.uk
Sea Salt & Potassium Chloride blends / Standard blends – 20%, 30%, 40% reduced sodium
Bespoke blends can be developed to suit customers' requirements
What does it replace?
Reduction in Sodium
What level of salt/sodium reduction can be achieved using this ingredient?
Reductions can be tailored to suit the customer's specific needs
What functionality does it have in the recipe?
Can be used as normal salt replacement
Already in products on the market in the UK, EU, or elsewhere?
Similar products can be widely available
Formats available (powder/paste/liquid)
Granular salt/Powder
Effect on product's shelf life?
No effect
Is it allergenic?
No
Any regulatory limitations such as 'novel food' classification?
No
When and how is the ingredient added?
Low Sodium blend to be used as normal salt would be added / customers discretion
Different cooking temperatures or times?
Product will be used in the same functionality as salt.
Is there a maximum level of ingredient permitted per application?
No to be determined by the end user
Effect on taste / consumer acceptability?
Salt replacement
Any long-term health effects?
Sodium reduction should lower blood pressure and reduce cardiac issues.
Declaration on the label
Customer discretion
Storage requirements
Ambient Storage and Distribution
Any COSHH implications for use in manufacturing / is PPE needed for handling or storage conditions?
No
Any ethical/environmental considerations for sourcing?
None
Does the manufacturing site have standard certifications such as BRC?
Yes Fully BRC Accredited blending facility

Seaweed & Co. Manufacturer of PureSea® seaweed ingredient Dr Craig Rose, Founder & MD: craig@seaweedandco.com www.seaweedandco.com
PureSea® seaweed ingredients (in natural and smoked flavours, and powder and granule particle sizes) for use to enhance flavour and boost nutrition.
What does it replace?
Flavour enhancement ingredients, specifically salt
What level of salt/sodium reduction can be achieved using this ingredient?
Depending on the product type, it can be up to 90% sodium reduction, but more often around 50%
What functionality does it have in the recipe?
Enhanced nutrition offering key nutrients that also provide approved health claims of supporting normal: <ul style="list-style-type: none"> - Development in children - Thyroid health and function - Energy yielding metabolism - Cognitive function - Nervous system - Skin
Already in products on the market in the UK, EU, or elsewhere?
UK and EU
Formats available (powder/paste/liquid)
Powder and granules
Effect on product's shelf life?
Research has shown enhanced shelf life potential. Needs testing in each application, but worked in cheeses, sausages/burgers and baked goods
Is it allergenic?
No
Any regulatory limitations such as 'novel food' classification?
No
When and how is the ingredient added?
Early in product manufacture. Added in powder blend formats, or as would otherwise use salt for example
Different cooking temperatures or times?
Depends on product. But treating products as normal processing it will work
Is there a maximum level of ingredient permitted per application?
100mg per serving allows for the health claims
Effect on taste / consumer acceptability?
Product dependent
Any long-term health effects?
Positive effects through addressing recognised UK-wide deficiencies
Declaration on the label
Seaweed / Sea Vegetable / Organic Scottish Seaweed and similar descriptive names
Storage requirements
Dry, cool and dark
Any COSHH implications for use in manufacturing / is PPE needed for handling or storage conditions?
None
Any ethical/environmental considerations for sourcing?
None
Does the manufacturing site have standard certifications such as BRC?
SALSA

Seaweed Enterprises

info@houseofseaweed.com

www.houseofseaweed.com

A range of seaweed seasonings and infusion products that provide a salt flavour based on natural mineral salts rather than sodium salt. On average, seaweed contains 75% less sodium than table salt, is sustainable and delicious, packed full of essential minerals and umami.

Products available

Kombu – Strips (infusion), Flakes, powder

Shony- A unique blend of seaweed flakes

Dulse- Flakes and powder

Each of these products hold a different flavour profile which can help manufacturers develop great tasting dishes whilst lowering sodium salt content

What does it replace?

Helps reduce remove sodium Salt

What level of salt/sodium reduction can be achieved using this ingredient?

Up to 100%

What functionality does it have in the recipe?

- Powders disperse evenly, flakes remain whole in dish
- Insoluble Viscosity & water binding
- Gelation
- Water holding
- Flavour enhancing, add umami- savoury deliciousness, seaweed holds the most umami of any food ingredient.
- Salty flavour with low sodium content

Already in products on the market in the UK, EU, or elsewhere?

UK, EU, USA. As a salt replacer this is the start of the journey for Mara. We will be launching a specific product this summer to support the food industry reduce sodium salt levels in line with upcoming HFSS legislation

Formats available (powder/paste/liquid)

Whole leaf infusion, flakes, powder

Bulk supply, 1kg, 120g tubs

Effect on product's shelf life?

Has been shown to extend products due to the hygroscopic nature

Is it allergenic?

Currently carries a mollusc and crustacea allergen notice

Any regulatory limitations such as 'novel food' classification?

No

When and how is the ingredient added?

Most applications provide the best salt alternative result by adding as a central ingredient into a recipe rather than a topical application. The ingredients are usually stirred in as other herbs, spices or seasonings would be added. The Kombu strips are the only ingredient which requires removal following infusion, much like a bay or lime leaf.

They can be used in a diverse variety of dishes.

- Vegan and vegetarian approved
- Sauces, stocks, liquids
- Ready meals Protein products (burgers, sausages)
- Baked goods
- Sweet & savoury categories
-

Different cooking temperatures or times?

Will depend on application, temperature, water content, solvency, time, pressure, sheer and concentration levels

Is there a maximum level of ingredient permitted per application?
Usage: Amounts dependent on application and are recommended alongside a reduction in standard salt
Effect on taste / consumer acceptability?
Some of the seaweed varieties can have a greater seafood aroma or flavour, whilst others have no direct fishy flavour whatsoever
Any long-term health effects?
"High In" five key essential minerals: Iron, Magnesium, Iodine, Potassium and Calcium
Declaration on the label
Kombu and Organic ranges are both Organic All products are vegan approved
Storage requirements
Ambient, with 29 month shelf life
Any COSHH implications for use in manufacturing / is PPE needed for handling or storage conditions?
No
Any ethical/environmental considerations for sourcing?
Seaweed is sustainable natural resource, a climate positive crop that can help our people and planet. See further information here: https://maraseaweed.com/pages/sustainability
Does the manufacturing site have standard certifications such as BRC?
Salsa Accreditation