AgriCoat NatureSeal

Home of natural fruit and vegetable coatings for pre and post-harvest protection

About us

AgriCoat NatureSeal is at the forefront of research and development in edible coating technologies; successfully creating safe, edible, biodegradable, cost-effective pre- and post-harvest treatments for fresh produce.

Our NatureSeal® products are used worldwide by processors of fresh cut fruits and vegetables; helping our clients supply food service operators, caterers, retailers and QSR restaurants with quality, healthy fresh produce.

Our business is driven by innovation and our customers' needs always come first. This philosophy has ensured we build long term relationships with our clients worldwide; relationships based on mutual trust and our commitment to offering first rate products and service.

As a subsidiary of the American company Mantrose Haeuser Inc., we belong to a group offering food coatings and functional ingredients to a range of industries, including snack and confectionery producers, bakeries as well as the pharmaceutical and nutraceutical industries. The American group can trace a history of an involvement in fruit coatings back to the pioneering days of fruit waxing, almost 100 years ago.

Today AgriCoat NatureSeal's business spans four main sectors of the fresh produce industry - from orchard to lunchbox.

Semperfresh
Pre- and Post Harvest protection of fresh produce

NatureSeal FS
Washing and decontaminating fresh produce

NatureSeal
Maintaining shelf life of fresh cut fruits and vegetables

NatureSeal for maintaining shelf life of fresh cut fruits and vegetables

Co-developed and jointly patented with the USDA, NatureSeal products are vitamin and mineral powder blends designed to maintain the natural taste, texture and colour of fresh cut fruits and vegetables.

Acknowledged to be a key driver of the snack apple industry, NatureSeal enables snack apple slices to be produced with up to two weeks' shelf life. Today more than a dozen different NatureSeal blends are offered for over 30 types of produce.

As the worldwide leader in shelf-life extension technology for fresh cut fruits and vegetables, our scientific team continues to develop new formulations and technologies. We aim to broaden our capabilities and extend the support we provide to our customers; often working in partnership to diversify their product range or enabling them to reach wider markets with a longer shelf-life.

Jointly patented with the USDA, the first NatureSeal formulation was created specifically to maintain the taste, texture and colour of sliced apples and pears.

Today, NatureSeal offers a wide variety of formulations that are effective on everything from sliced kiwi fruit to celery, carrots and other root crops such as potatoes, sweet potatoes, parsnips and turnips. We also offer formulations for more exotic fruits and vegetables such as star fruit, guava, banana plantain, mango, persimmon and even jicama and cactus fruit.

NatureSeal extends the shelf-life of fresh cut produce to anywhere between 7-21 days without compromising the fresh quality.

Application:

NatureSeal products are formulated as precise vitamin and mineral powder blends. Simply dissolved in water, NatureSeal is applied, typically by dipping, as soon as possible after cutting and peeling.

The products are free from sulphites and other allergens and contain no GMO's. Several formulations have been accepted for use in organic production by associations such as ECOCERT in Europe, The Soil Association in the UK and by OMRI in North America.

Benefits of NatureSeal:

NatureSeal maintains all aspects of shelf life but is not a preservative and so must be used in conjunction with good washing and sanitation.

Enzymatic browning is inhibited; maintaining the fresh cut colour and appearance without compromising flavour. Traditional alternatives to sulphites typically impart unacceptable tastes.

NatureSeal also maintains the texture of sliced produce, ensuring fresh cut fruit and vegetables maintain their desirable, crisp, mouth feel.

In fruits such as cut melons and pineapples, NatureSeal helps to limit purge and water loss.

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NatureSeal FS for washing and decontaminating fresh produce

The ***First Step*** in processing, NatureSeal FS is an alternative to chlorine washes. Based on a mixture of fruit acids, NatureSeal FS reduces bacteria and spoilage organisms and is also permitted as a processing aid in organic produce.

NatureSeal FS is used to wash many fruits including pineapples, melons, apples and various citrus fruits and also crops such as onions, carrots and other root crops. NatureSeal FS is also used to wash certain leafy crops such as watercress leaving produce appearing fresh and natural.

NatureSeal FS is a blend of fruit acids and is available either as a liquid concentrate or as a powder blend for addition to wash tanks allowing produce to be cleaned and decontaminated before peeling and cutting. NatureSeal FS is a proven alternative to chlorine washes and has been accepted for use in organic production by ECOCERT in Europe and by The Soil Association in the UK.

Application:

NatureSeal FS works well with washing machines or Jacuzzi-style tanks designed to ensure lots of agitation. The product is monitored easily by measuring pH, if this rises outside the recommended range; more NatureSeal FS is simply added to the wash tank.

Other washes based on surfactants may cause excessive foaming problems; additional antifoams should not be necessary with Natureal FS.

Benefits of NatureSeal FS:

Unlike other processing aids, such as those based on chlorine, NatureSeal FS is not adversely affected by the build up of organic matter (soil, leaves and other plant matter). This means that there is no need for frequent changes of wash tank water; some processors operate their wash tanks for at least 8 hours before discharging to drain. This can add up to a significant saving in water use. Chlorine, which is affected by organic matter, requires more frequent re-dosing and hence the danger of imparting taste taints. This requires wash tanks to be discharged and the water to be changed more often.

Semperfresh™ for Pre- and Post Harvest protection of produce

Semperfresh fruit coatings are based on a combination of sugar esters and other edible ingredients; vegetable oils and plant cellulose. Applied by dipping, drenching or spraying, Semperfresh works by coating each fruit in a very thin, invisible, odourless and tasteless film which slows down the ripening process – effectively putting the produce "to sleep". The coatings protect against chilling injury, pitting and mechanical damage; whilst maintaining firmness, fresh appearance and colour. Tests have shown that Semperfresh can help fruit stay fresh for up to twice as long. Applied as an orchard spray, our sucrose ester coatings have been used to minimise rain induced cracking and splitting in stone fruit.

Semperfresh coatings are used to protect fruits from bruising and rub marks during grading and packing. Importantly the coatings slow down the fruit's respiration and since the coatings are designed to be more permeable to carbon dioxide gas than oxygen they create a modified atmosphere inside the fruit tissue.

This modified atmosphere is effective in delaying ripening and reducing spoilage in a wide range of fresh fruits; extending storage and shelf life. Apples, pears and plums protected with Semperfresh coatings remain firmer and greener with less break down. Sweet cherries treated after harvest also remain firmer with less pitting and greener stem colour. Semperfresh is also used on certain tropical and sub-tropical fruits. Some physiological disorders including skin pitting and chilling injury are reduced in fruits such as pineapples, bananas, citrus and melons.

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