

# Edible Coatings

Enhance your confections with exceptional edible coatings.

## **Certicoat® Polishes**

For starch, gelatin, pectin gummies, licorice and fruit strips. Certicoat polishes are special formulations of oils and waxes used as a coating film, which provides superior anti-stick properties with improved gloss. These products can be used in continuous oilers, traditional coating pans, or submersion applications.



## **Certiseal®**

Certiseal coatings increase film build rates and produce a superior finish. This aqueous gum based product seals the centers of nuts and dried fruits to improve adhesion or to prevent fat migration. Certiseal also smooths the surface of chocolate confections and provides gloss as the first coating in a two step barrier system.



## **Crystalac®**

Shellac glazes provide a consistent high quality gloss from pan to package, without overnight tray drying. We offer an anti-scuff coating as well as our 1-step sugar shell polish.



## **Certified® Confectioners Glazes**

Our shellac based confectioners glazes enhance and protect high gloss shine on your confectionery products.



## **Waxes**

Our waxes and wax blends offer the lightest colors and finest particle sizes.

Select from our current line of products or work with us to develop a custom coating or application method to meet your company's specific needs.

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Organic, palm-free and halal versions are available for each product category.



**Mantrose-Haeuser Co., Inc.**

At the Forefront of Coating and Ingredient Technology

# Confectionery Coatings

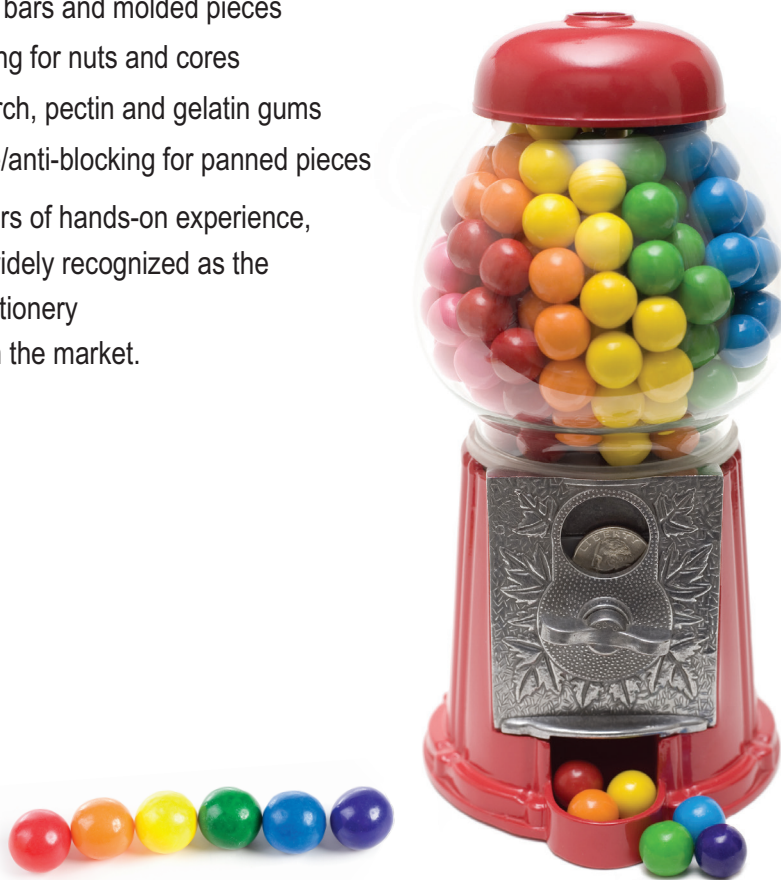
Through decades of excellence, **Mantrose-Haeuser's** confectionery glazes, gum coats and polishes have earned their place among the confectioner's most trusted ingredients.

The glazes create an attractive, protective gloss finish in automated or conventional panning of confectionery products.

**These odorless and tasteless surface finishing agents provide the following:**

- Enhanced shelf-life
- Scuff resistance on bars and molded pieces
- Adhesion and sealing for nuts and cores
- Anti-sticking for starch, pectin and gelatin gums
- Moisture resistance/anti-blocking for panned pieces

Backed by many years of hands-on experience, these products are widely recognized as the finest, natural confectionery coatings available on the market.



*Select from our current line of products or work with us to develop a custom coating or application method to meet your company's specific needs.*



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## Maintaining quality and shelf life in fresh cut fruits and vegetables

### The Challenge.

Cutting, peeling and slicing fresh produce throws up a number of challenges to shelf life including wounding reactions which lead to discoloration and browning, loss of structural integrity, accelerated water loss, softening, mechanical shocks leading to cracks and bruises.

Enzymes, called Polyphenol oxidases (PPO), initiate these browning reactions.

Various methods can be deployed to reduce the impact of browning. The most important of these include temperature management, the exclusion of oxygen and the use of dips to control browning and maintain texture of cut surfaces.

NatureSeal® products are widely used to maintain quality and extend shelf life.

### Features and benefits.

- Proprietary powder blends of vitamins and minerals
- Used as processing aids to maintain colour (prevent enzymatic browning).
- Maintains texture – reduces moisture loss and softening.
- Does not impart flavour, colour, odour or taste.
- Developed with USDA and conform to UK and EU Food Law.
- Free from allergens and sulphites.
- Certain formulations permitted in organic production.
- Kosher and Halal
- Custom blends for different fruits and vegetables.

NatureSeal is applied by a simple dipping or fluming process. Produce needs to be dipped as soon as possible after cutting. NatureSeal will effectively control browning in fruits such as apples and pears and in vegetables such potatoes and parsnip.



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## NatureSeal for apples & pears



NatureSeal will provide up to 21 days shelf life in fresh cut apple and pears; preventing browning and maintaining crispness without impacting on flavour and odour. Conventional and organic formulations are available.

## NatureSeal for stonefruit



NatureSeal formulations are available to maintain shelf life in prepared nectarines, plums and peaches.

## NatureSeal for avocados and guacamole



NatureSeal will maintain colour and shelf life in prepared avocados (dices, slices, chunks) typically offering up to 5 -6 days shelf life. Ideal for avocado inclusions in salads, sandwich fillings, sushi etc. Alternative formulations are available for guacamole.

## NatureSeal for banana



NatureSeal maintains colour in fresh cut banana for up to 4 -5 days.

## Carrots, coins, sticks and shreds



NatureSeal will maintain colour, reduce whitening and silvering, and helps to control bending and cracking in carrot sticks. NatureSeal prevents carrots drying out.

## Potatoes and other root crops



NatureSeal can eliminate the use of sulphites and will maintain fresh appearance and colour in potatoes and other root crops such as parsnip. Colour is maintained in other root crops such as sweet potatoes, swede.

## NatureSeal for mango, kiwi fruits, pineapples, melons and persimmon



NatureSeal helps to reduce purge, translucency and breakdown; maintaining the brightness of the cut fruits.

NatureSeal FS (product wash), developed to replace chlorine, available for fruit, vegetables and salads.

Fruit	NatureSeal Formulae	Shelf life/days
Apple	NatureSeal AS5	5-10 days
Banana	NatureSeal BAS10	5-10 days
Pear	NatureSeal GU1	5-10 days
Pineapple	NatureSeal AS5	5-10 days
Pomegranate	NatureSeal AS5	5-10 days
Mango	NatureSeal GU1	5-8 days
Lime	NatureSeal AS5	5-8 days
Peach	NatureSeal GU1	5-8 days
Plum	NatureSeal GU1	5-8 days
Avocado	NatureSeal GU1	5-8 days
Kiwi	NatureSeal GU1	5-8 days
Melon	NatureSeal AS5	5-10 days
Cantaloupe	NatureSeal AS5	5-10 days
Strawberry	NatureSeal GU1	5-8 days

Vegetables	NatureSeal Formulae	Shelf life/days
Baby carrot	NatureSeal AS5	18-21 days
Romaine lettuce	NatureSeal PS10	10-12 days
Potato	NatureSeal PS10	10-15 days
Lotus Root	Natureseal PS10	10-15 days
Sweet Potato	NatureSeal PS10	10-15 days
Iceburg lettuce	NatureSeal PS10	10-12 days
Chinese Yam	NatureSeal PS10	10-15 days
Cucumber	NatureSeal PS10	10-12 days
Cabbage	NatureSeal PS10	10-12 days
Celery	NatureSeal AS5	10-12 days
Bell Pepper	NatureSeal PS10	10-12 days
Okra	NatureSeal AS5	10-12 days
Eggplant	NatureSeal AS5	10-12 days
Cauliflower	NatureSeal AS5	10-12 days