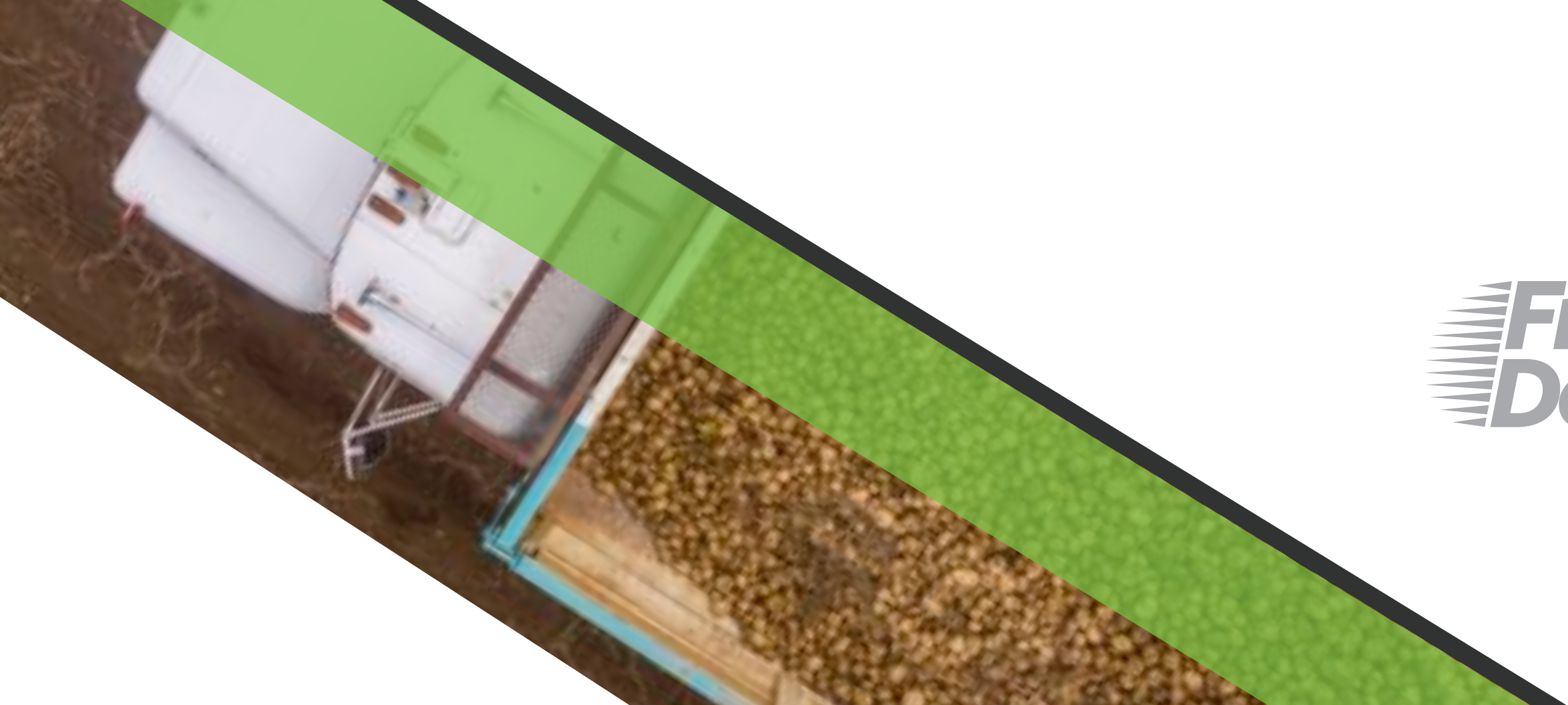




**Fresh**  
**Defense**<sup>®</sup>  
by Decco<sup>®</sup>

**Product Catalog**

**DECCO** <sup>®</sup>  
Naturally Postharvest



**DECCO**   
Naturally Postharvest

**Fresh  
Defense**®  
by Decco®



**Fresh Defense® by Decco® is a peace of mind for potato processors. A peace of mind that is backed by high-quality post-harvest solutions from Decco.**

Fresh Defense is your trusted source for potato storage products from Decco, the post-harvest solution provider from UPL. Fresh Defense solutions will protect your investment from harvest to the processing plant.

A comprehensive Fresh Defense potato storage management program from Decco will help mitigate sprouting and unwanted color and flesh issues therefore helping North American potato growers to continue to provide high-quality fresh and processed potato varieties.

Fresh Defense Portfolio	Ingredient	Sizes Available	Purpose
Decco® 271	Chlorpropham	Flake or 4 x10 brick option	Potato sprout inhibitor
Decco 400 EC	Chlorpropham	5-gallon 30-gallon	Potato sprout inhibitor
Decco DMN Aerosol™	1,4-Dimethylnaphthalene	5-gallon	Dormancy enhancer
Decco 100 Aerosol; Decco 050 EC, Decco 070 EC	Clove Oil	5-gallon 30-gallon	Natural potato sprout inhibitor
Deccosan™ 5; Deccosan 15	Peroxyacetic acid	5-gallon 55-gallon	Sanitizer; disinfectant
Potato Lustr™ C	Carnuba Wax	30-gallon	Luster and shrinkage control
Fruitgard™ Bactericide/Fungicide	Chlorine dioxide	80-lb combo 30-gallon drum (240 lbs.)	Antimicrobial; improves shelf life
TeleSense	Respiration Management Dashboard	N/A	Sensor Technology in Storage

# Decco 271 Potato Sprout Inhibitor

99% Chlorpropham

# Decco 400 EC Potato Sprout Inhibitor

37% Chlorpropham

Sprout growth contributes significantly to the weight loss in harvested potatoes. Sprouts are responsible for increased respiration leading to more surface moisture affecting quality of the stored potatoes. Sprout suppression is a crucial part of the storage process.

For years, the US potato industry has looked to chlorpropham (CIPC) as a reliable post-harvest sprout inhibitor. Usually applied by cold aerosol fog on harvested potatoes, CIPC has been proven effective in long-term sprout control during cold temperature storage.

## Features & Benefits

- Labeled for post-harvest of processed and fresh market potatoes
- High rate of efficacy for potato sprout control in cold storage
- Available in bagged (flaked) or finished blocks (brick)



- Use Decco 271 Potato Sprout Inhibitor in long-term potato storage
- Decco 400 EC Potato Sprout Inhibitor is a great solution for treating potatoes once they are coming out of storage but before shipping to the end user.
- May be used in combination with Decco DMN as part of an overall potato storage program

**Decco 271 Potato Sprout Inhibitor** (99% Chlorpropham)

**Available in brick or flake; 4 x 10lb**

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**Decco 400 EC Potato Sprout Inhibitor** (37% Chlorpropham)

**Emulsifiable concentration (EC) is available in 5-gallon or 30-gallon**

NEW!  
from  
DECC

# Decco DMN Aerosol

1,4-Dimethylnaphthalene

Potato growers worldwide are faced with the constant pressure of providing clean, fresh potatoes to be consumed in the fresh market as well as processed for french fries and potato chips. Color, flesh strength (turgidity) and consistent variety quality are key to both the fresh market and processed business.

Fresh market potato consumers look for consistent variety skin and flesh color along with minimal bruising or soft spots. Decco DMN Aerosol applied in early storage can reduce the production of the chemical which is the major source of bruising and color change in the flesh.

For french fry and chip potato processors, each company has its own standards of quality and variety control which demand consistent color management and flesh strength to ensure slicing uniformity.

Decco DMN Aerosol, used with other products such as CIPC, PAA, FruitGard™ and clove oil as part of an overall Fresh Defense® storage program for sprout and diseases, can enhance the following properties of stored potatoes:

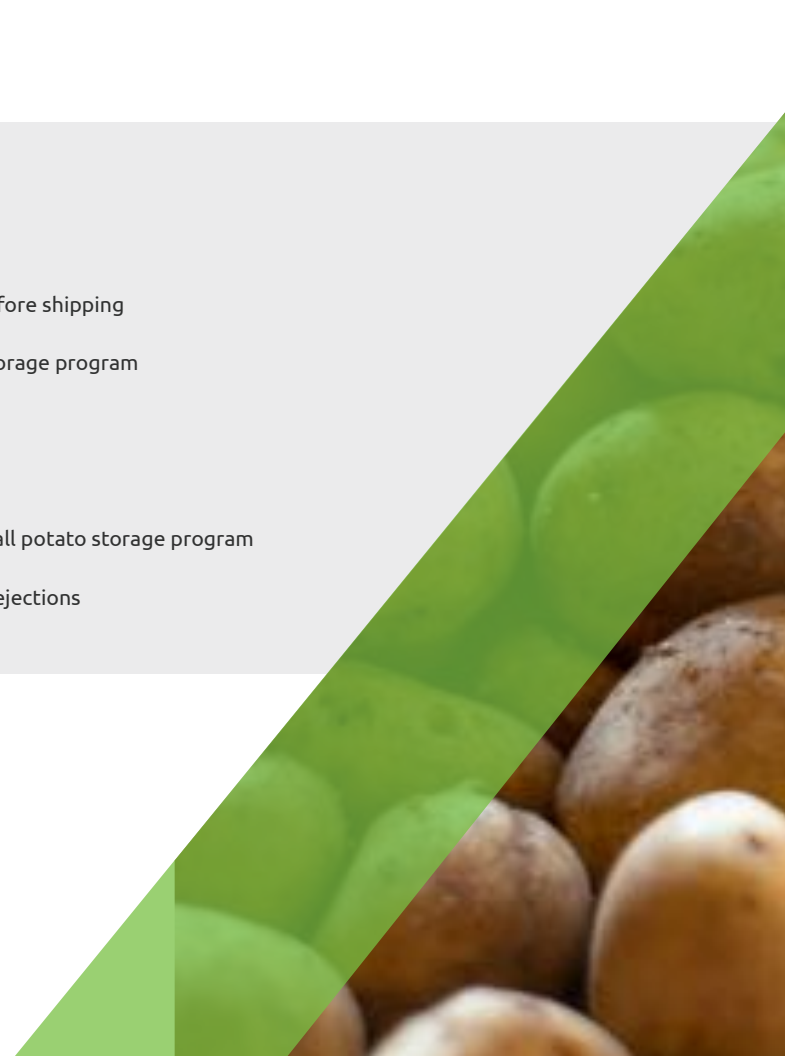
- Length of Storage
- Quality Sprout Control
- Disease Management
- Color Variations
- Flesh Strength

## Features & Benefits

- Labeled for post-harvest potatoes in storage
- May be applied throughout storage season up to 2-3 weeks before shipping
- Use as a stand-alone in conjunction with your overall potato storage program
- Reduce color variations and bruising; increase flesh strength
- Reduced respiration; moisture retention
- Works in conjunction with CIPC and clove oil as part of an overall potato storage program
- Higher quality appearance of potatoes to help minimize load rejections

**Decco DMN Aerosol** (1,4-Dimethylnaphthalene)

**Available in 5-gallon jugs**





## Clove Oil



### Decco Aerosol 100 Potato Sprout Inhibitor

100% Clove Oil

### Decco 050 EC Potato Sprout Inhibitor

50% Clove Oil

### Decco 070 EC Potato Sprout Inhibitor

100% Clove Oil

After potatoes have been stored, clove oil may be used as a natural sprout control solution. Naturally-derived clove oil is approved for both conventional and organic potato storage programs. Once applied, clove oil will naturally burn exposed sprouts and peeps that are on the surface of the potato.

Clove oil is best used on exposed potato sprouts that are just beginning to peep. A rigorous standalone program may be used for managing new sprout development.

For best control, new sprout development may be suppressed with an integrated control program with Decco Aerosol 100, Decco 050 EC.

For conventional uses, Decco 070 in conjunction with a sprout inhibitor product like Decco 271 Potato Sprout Inhibitor is an effective sprout control program.

### Decco Aerosol 100 Potato Sprout Inhibitor

Designed for use with cold fogger equipment, Decco Aerosol 100 is a natural-based tool for use in potato storage facilities.

### Decco 070 EC Potato Sprout Inhibitor

Decco 070 EC is applied at about 1% active ingredient level on washed and damp dried potatoes. The diluted material should be applied using spray nozzles placed evenly across the rollers on which the potatoes are being moved.

### Decco 050 EC Potato Sprout Inhibitor

For a low option clove oil spray, Decco 050 EC is a 50% clove oil formula applied at about 1% active ingredient level on washed and damp dried potatoes. The diluted material should be applied using spray nozzles placed evenly across the rollers on which the potatoes are being moved.

#### Features & Benefits

- Controls exposed sprouts on stored potatoes
- 100% natural clove oil
- OMRI Listed for Organic Use®

**Clove oil products are available in 5-gallon and 30-gallon size**

## PAA + Hydrogen Peroxide



### Deccosan 5

26.5% Hydrogen Peroxide; 4.9% Peroxyacetic Acid

### Deccosan 15

22% Hydrogen Peroxide; 15% Peroxyacetic Acid

Peroxyacetic acid-based (PAA) products are natural-based solutions for cleaning equipment and storage facilities. PAA is also effective for the control of spoilage and decay causing bacteria and fungi in commercial operations and where water or ice contacts raw or fresh, post-harvest or further processed fruits and vegetables.

#### Features & Benefits

- Antimicrobial solution for sanitization and disinfecting
- May be used in fogging on post-harvest vegetables
- OMRI-listed for organic vegetable production

Deccosan 5 and Deccosan 15 are sanitizer/disinfectants developed as institutional sanitizers as well as disinfectants for previously-cleaned hard, non-porous surfaces in food facilities. Use in the static or continuous sanitizing, washing or rinsing of conveyors, slicers, saws, and equipment. In addition, Deccosan 5 and Deccosan 15 may be also be applied in a cold fogger system\*.

#### Sizes Available

**5-gallon**  
**55-gallon**

\*Not for use in California

# Chlorine Dioxide

## Fruitgard Bactericide/Fungicide A

3.2% Sodium Chlorite

## Fruitgard Wipeout Acid Activator B

99% Zeolite activator

When fighting pathogenic bacteria and fungal microorganisms in stored potatoes, chlorine dioxide is a reliable solution. Chlorine dioxide (ClO<sub>2</sub>) is created when sodium chlorite (NaClO<sub>2</sub>) mixes with a stabilized acid zeolite impregnate. ClO<sub>2</sub> is a water-soluble oxidizer, proven to reduce spoilage organisms and pathogenic bacteria on stored produce. The chlorine dioxide gas is released in a controlled manner in less than 24 hours.

FruitGard™ controlled release technology provides consistent disease control because concentrations of chlorine dioxide gas are uniform and circulating air carries the gas around fruit where it condenses primarily on infection sites.

### Features & Benefits

- Kills pathogens, preventing post-harvest decay
- Chlorine dioxide dry gas fumigant, produced at a controlled rate, mixing proprietary granules
- Oxidizes on existing moisture
- Penetrates cuts, wounds and stem scars
- Non-corrosive to typical surfaces
- No residue, no rinse required

### Sizes Available

**80-lb combo  
30-gallon drum (240 lbs.)**



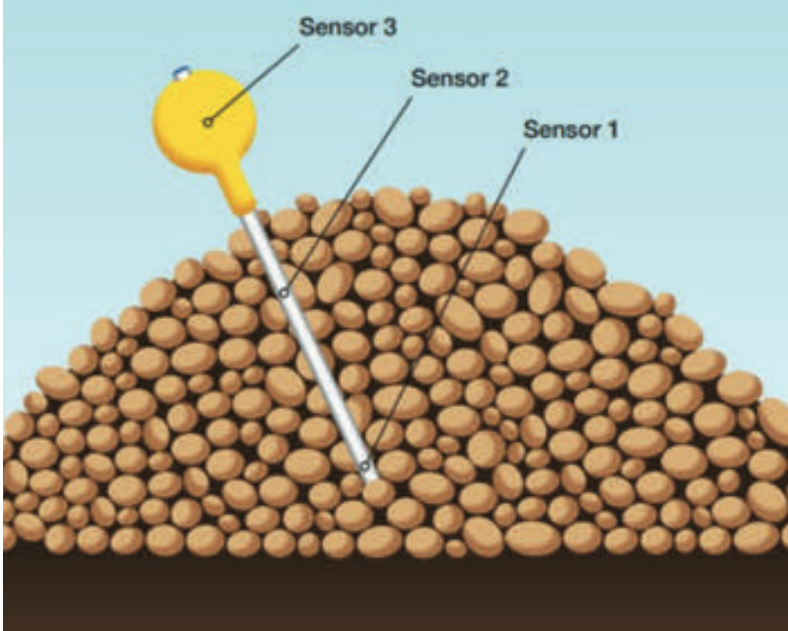
# TeleSense®

Our partner TeleSense® provides Industrial IoT, real-time environmental monitoring solutions for post-harvest storage and transport. We help manage environmental risks in the world's food supply chain using artificial intelligence and machine learning algorithms. We automate data collection and wirelessly upload it for analysis.

Potatoes and onions are difficult to store. If not kept within a precise temperature range, they may begin to sprout or decay. By inserting a CellularSpear into your potatoes or onions you will always know your current storage conditions and be able to act quickly to prevent future problems.

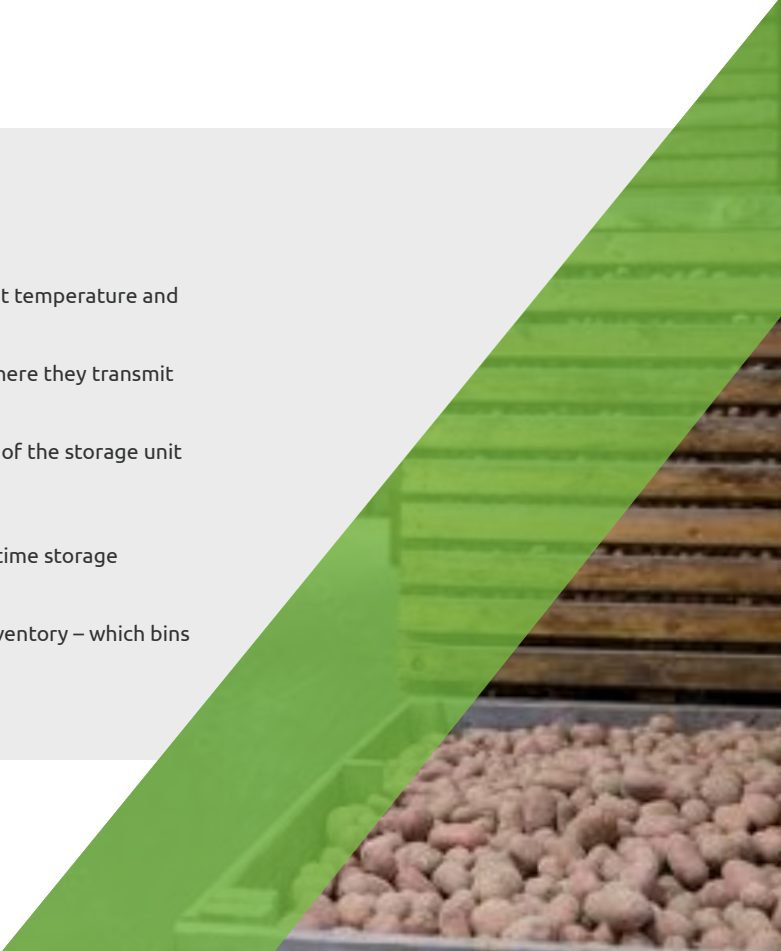


**CellSpear from TeleSense**



### Features & Benefits

- Both spoilage and sprouting can be controlled through efficient temperature and RH control
- Sensors are wireless and easily placed in the potato pit from where they transmit information to a smartphone or computer
- Remotely monitor the temperature, relative humidity and CO2 of the storage unit
- Receive alerts and notifications to take preventive measures
- Optimize ventilation based on analytics and insights from real-time storage conditions
- Create a storage profile and make informed decisions about inventory – which bins receive priority when emptying





## About Decco

Decco US Post-Harvest has been a specialist in the treatment of fruits and vegetables, along with the facilities and equipment that processes them, since 1932. That's one reason why growers and packers count on Decco every year to protect billions of pieces of potatoes, fruit and vegetables.

Decco is here to give you peace of mind. The fact is, you have choices for postharvest protection and building sanitation, and many services and products start to look the same. How can you make the best choice for your operation? Go with experience. Go with expertise. Go Decco.

Decco offers best in class coatings, fungicides, facility sanitation and storage treatments.



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[www.deccous.com/fresh-defense](http://www.deccous.com/fresh-defense)



**DECCO** 

**Fresh**  
**Defense**<sup>®</sup>

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