COMPANY OVERVIEW

INCLUSIONS

SensoryEffects is the market leader in the manufacture of lipid-based inclusions, a convenient and cost-effective method for delivering new flavors, aromas and colors.

Products
- Baking Mixes
- Cookies
- Frozen Dough
- Pancakes
- Hot Cereal
- Ice Cream (Low Melt Point)
- Muffins

Innovations
- High Melt Point
- Low Melt Point
- Non-GMO
- Non-PHO
- 0 Trans Fat

Certifications
- SQF Level II Certification
- Kosher

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MANUFACTURING & PROCESSING

EFFICIENCY & DIFFERENTIATION

MANUFACTURING OVERVIEW

- Proprietary equipment that produces numerous sizes and shapes of inclusions
- Manufacturing configuration allows for highly customizable products
- Quality control and testing practices to ensure customer specifications are consistently met
- Pilot plant dedicated to formula process validation and scale-up assistance

FLEXIBLE & DIVERSE

PROCESSING CAPABILITIES

- Low and high melt point products
- Ability to produce multiple shapes and sizes of inclusions in large and small order sizes
- Both dairy and non-dairy dedicated lines
- Non-GMO processing available
OUR PRODUCTS

VALUE-ADDED INCLUSIONS

SensoryEffects Inclusions are functional ingredients that help protect and deliver flavor, aroma, color and texture to a variety of end-use applications. These fat-based inclusions were designed to be easily incorporated into food products and only release their functional components once the melt point of the fat is obtained in process.

There couldn’t be an easier way to add a new twist to an old favorite by adding a SensoryEffects delivery system.

THE APPLICATION AND PROCESSING EXPERTS

APPLICATION BENEFITS

• Protect and deliver sensitive ingredients to a food system
• Impart targeted sensory functionalities – flavor, aroma, color and texture
• Customized to suit application needs
• Easy flavor combinations – no flavor balancing
• Range of available sizes and shapes to create desired visual effect
• Low cost way to add new flavors to products

PROCESSING BENEFITS

• Easy to store, weigh and use
• Easy to add to mix, batter or dough
• Available year-round, protecting against seasonal variability in supply and pricing
• Long shelf life
• Off-the-shelf and customized versions available
• One step addition – blends evenly into a variety of products
• Does not inhibit yeast (cinnamon flavor)
• Soft and pliable – will not puncture or tear dough
• Does not stick to processing equipment
• Does not dust like powders
SHAPES & SIZES

FLAKES

- **Mini Flakes**
  10mm x 4mm x 1.9mm
  Pictured: Strawberry Mini Flakes

- **Regular Flakes**
  10mm x 10mm x 2.5mm
  Pictured: Brown Sugar Regular Flakes

- **Custom Flakes**
  Available in a variety of shapes and sizes
  Pictured: Dark Choco-Flakes™

NUGGETS

- **Small Nuggets**
  1.6mm x 2mm
  Pictured: Cinnamon Small Nuggets

- **Medium Nuggets**
  3.2mm x 3mm
  Pictured: Blueberry Medium Nuggets

- **Large Nuggets**
  4.8mm x 5mm
  Pictured: Asiago Cheese Large Nuggets

*Product images shown are representative of actual shapes and sizes.
Applications Comparison

Photos below show the visual impact of the various shapes and sizes of SensoryEffects cinnamon inclusions in a standard muffin recipe at a 10% usage level.

**FLAKES & NUGGETS**

- **Mini Flakes**
  Approx. 9,000 pieces/lb.

- **Regular Flakes**
  Approx. 2,200 pieces/lb.

- **Small Nuggets**
  Approx. 92,000 pieces/lb.

- **Medium Nuggets**
  Approx. 15,000 pieces/lb.

- **Large Nuggets**
  Approx. 6,300 pieces/lb.
FLAVOR CATEGORIES

FRUIT

Working with real fruit in baked goods and other food products has its challenges: frozen storage and handling, inconsistent supply, price volatility and natural variations in flavor, color and quality. SensoryEffects inclusions in fruit flavors offer a convenient way to add a burst of fruit flavor to a variety of baked goods without the challenges of working with real fruit.

- Delivers enhanced fruit flavor and aroma
- Offers easy handling and incorporation into batters or mixes
- Adds authentic visual cues and visual impacts
- Cost effective versus IQF fruits
- No refrigerated storage required
- Natural colors, flavors and non-GMO formulations available

SELECT FLAVORS

- Apple
- Banana
- Blackberry
- Blueberry
- Cherry
- Cranberry
- Grape Jelly
- Key Lime
- Lemon
- Mango
- Orange
- Peach
- Raspberry
- Strawberry

And many more!

Shelf Life
15 months

Suggested usage level is 5-10% of dough/batter weight
FLAVOR CATEGORIES

SPICE/SAVORY

- Cost effective in comparison to dried spices and seasonings
- Suitable for vegetarian food products
- Offers easy handling and incorporation in batter and dough
- Adds authentic visual cues
- No refrigerated storage required
- Can be made using natural colors and flavors

SELECT FLAVORS

- Garlic
- Jalapeño
- Onion
- Ketchup
- Mustard
- Salsa
- Roasted red pepper
- Spinach
- Tomato oregano
- Pepperoni
- Sausage
- Chipotle

And many more!

Suggested usage level is 5-10% of dough/batter weight

Shelf Life
15 months
BROWNS

• Protects yeast-inhibiting ingredients (cinnamon)
• Delivers enhanced flavor and aroma
• Offers easy handling and incorporation into batters and mixes
• Adds authentic visual cues
• No refrigerated storage required
• Natural colors, flavors and non-GMO formulations available

SELECT FLAVORS

• Brown Sugar
• Butterscotch
• Caramel
• Chocolate
• Cinnamon
• Coffee
• Espresso
• Pumpkin Spice
• Ginger
• Graham Cracker
• Honey
• Maple
• Molasses
• Toffee
• Marshmallow

And many more!

Suggested usage level is 5-10% of dough/batter weight

Shelf Life
24 months
**FLAVOR CATEGORIES**

**DAIRY**
- Cost effective versus real dairy products
- No refrigerated storage required
- Adds authentic visual cues
- Natural colors, flavors and non-GMO formulations available
- Available in kosher pareve upon request
- Delivers enhanced flavor and aroma
- Offers easy handling and incorporation

**SELECT FLAVORS**
- Asiago
- Blue cheese
- Butter
- Cheesecake
- Cream Cheese
- Feta
- Italian cheese
- Mozzarella
- Parmesan
- Romano
- Sharp cheddar
- Somerset cheddar
- Swiss
- Yogurt
- Non-Dairy Cheddar

And many more!

Suggested usage level is 5-10% of dough/batter weight
PRODUCT CATEGORIES

NATURAL FLAVORS & COLORS (NTN)

- SensoryEffects inclusions using natural flavors & colors can help meet labeling requirements or front of package claims
- Real ingredients can be used:
  - Fruit powders
  - Honey granules
  - Cheese powders, etc.
- Flavors available for sampling:
  - Banana
  - Blueberry
  - Lemon
  - Strawberry
  - Raspberry
  - Cheesecake
  - Cinnamon
  - Somerset Cheddar
  - Molasses
  - Orange
  - Honey
  - Tomato
  - Apple
  - Caramel

GOOEY

- Creates gooey, stringy appearance
- Moderate piece integrity
- Springy mouthfeel
- Can be used in a wide variety of applications, including:
  - Bread
  - Muffins
  - Cakes
  - Waffles
  - Pancakes
- Flavors available for sampling:
  - Cinnamon
  - Maple
  - Marshmallow
  - Caramel
  - And many more!
PRODUCT CATEGORIES

NUT ALLERGEN FREE
- Our facility is Nut Allergen Free
- Flavors available for sampling:
  - Peanut butter
  - Hazelnut
  - Almond
  - Peanut
  - Walnut
  - Pecan
  - Pistachio

HIGH FIBER
- Inclusion contains a minimum of 25g of fiber per 100g of inclusions
- “good source of fiber” claims available
- Flavors available for sampling:
  - Cinnamon
  - Blueberry
  - Strawberry

NO SOY/NON-DAIRY
No Soy Lecithin
- No change in appearance or performance compared to standard formulas
- Sunflower lecithin replaces soy lecithin

Non-Dairy Cheese Inclusions
- Ingredients used are all kosher pareve (Example: no buttermilk or dairy flavors)
- Flavor concepts:
  - Parmesan
  - Sharp Cheddar
  - Asiago
  - Cheddar

NON-SCORCH/NON-STICK
- Useful for high heat/griddle applications such as: pancakes and waffles
- Prevents sticking to griddle
- Reduces flavor flash-off
# FUNCTIONAL BENEFITS IN APPLICATIONS

## SWEET GOODS

### FUNCTIONAL BENEFITS
- Flavor and aroma intensity
- Visual impact
- Non-bleed
- Inclusions can be customized to stay suspended in batter or dough
- Easy line extensions
- Multiple flavor combinations

### APPLICATIONS
- Cakes
- Muffins
- Scones
- Brownies
- Sweet rolls
- Cookies

## DRY MIXES

### FUNCTIONAL BENEFITS
- Replace hard to use/clean up ingredients in production
- Low water activity \( (a_w) \)
- Retain even distribution in the mix
- Long shelf life
- Shelf stable cheeses
- Easy line extensions
- Flowability

### APPLICATIONS
- Hot cereal
- Biscuits
- Cakes
- Muffins
- Pancakes
- Waffles
- Cookies
FUNCTIONAL BENEFITS IN APPLICATIONS

BREADS AND ROLLS

FUNCTIONAL BENEFITS
- Eliminates yeast inhibition associated with cinnamon
- Flavor intensity and aroma retention post-bake
- Non-bleed
- Variable sizes
- Blends easily into dough
- Does not tear or puncture dough

APPLICATIONS
- Breadsticks
- Breakfast bread
- Pan bread
- Baked bagels
- Pretzels
- Rolls
- Flatbreads

WAFFLES, PANCAKES AND BISCUITS

FUNCTIONAL BENEFITS
- Freeze-thaw stability
- Non-stick/Non-scorch formulas
- Non-bleed
- Superior flavor and aroma carry through

APPLICATIONS
- French toast
- Pancakes
- English muffins
- Waffles
- Biscuits
- Scones
PRODUCT CONCEPTS

SET YOUR PRODUCTS APART

Maple Bacon Sugar Cookie
- Bacon NTN SN
- Maple NT RF

Apple Cinnamon Cookie
- Apple Plus NT MN
- Cinnamon NT MF

Raspberry Crème Cookie
- Raspberry NT MF

Pineapple Upside Down Cookie
- Pineapple NT MF
- Cherry NT MN

Tomato Oregano Breadsticks
- Tomato Oregano NT SN

Jalapeño Tortillas
- Jalapeno NT SN

Cinnamon Swirl Bread
- Cinnamon NT RF

Peach Melba Muffins
- Peach NT MF
- Raspberry NT MF

Lemon Pound Cake
- Lemon NT MF

Key Lime Pie Cookie
- Key Lime NT MF

Salted Caramel Chocolate Chip Cookie
- Salted Caramel NT MF
- Chocolate NT RF

Honey Chipotle Biscuits
- Honey NT CF
- Chipotle NT MF

Berry Scone
- Blueberry NT RF
- Raspberry NT MF

Strawberry Banana Muffins
- Strawberry Banana NT MF

Jalapeno Raspberry Biscuits
- Jalapeno NT SN
- Raspberry NT MF

Garlic Tortilla
- Garlic NT SN
ICE CREAM INCLUSIONS

LOW MELT POINT INCLUSIONS

SensoryEffects Betrflakes™ and ChocoFlakes™ are used in ice creams, frozen desserts and toppings. The melt point of 80° F results in superior mouthfeel and flavor release. Explore the products we have already developed and imagine new flavor possibilities as well.

**Fully Commercialized Flavors**

- Textured Betrflakes™
  - Lemon
  - Churro
  - Espresso
- Non-Textured Betrflakes™
  - Malt
  - Red Butter Vanilla
  - Blue Butter Vanilla

**Choco-Flakes™**

- Dark Chocolate
- Milk Chocolate
- White Chocolate

**Additional Flavor Concepts**

- Baklava
- Bittersweet Chocolate
- Butter Mint
- Caramel
- Caramelized Sugar
- Cheesecake
- Cherry
- Cherry Lemonade
- Chocolate Donut Crumb
- Chocolate Toffee
- Cinnamon
- Coffee Cake
- Donut Crumb
- Graham Cracker
- Grape
- Green Apple
- Hot Cinnamon Bark
- Marshmallow
- Peanut
- Peanut Butter
- Semi-Sweet Chocolate
- Strawberry
- Strawberry Lemonade