Every product Tree Top makes is with our customer in mind. We work closely with product developers to design the optimum ingredient for any finished product. That’s true for Evaporated Apples and our entire array of fruit ingredients. Our customers rely on Tree Top’s technology, personalized service, and years of experience to develop products that meet their specific needs. Items shown are not inclusive of all products available, but are a reference for size and show a sample of our diversified product offerings. Regular or evaporated apples are dried to a variety of moisture levels ranging from 14% to 26% H₂O, depending on the product.

Regular Moisture Apple Applications:
- Cookies and cookie fillings
- Doughnuts and fritters
- Fresh salads
- Fruit and granola bars
- Granola cereals
- Muffins
- Pastry fillings
- Snack cakes and pies
- Specialty sausages
- Stuffings

For product specifications visit treetoppingredients.com
Benefits of Our Regular Moisture Apples:

- Shelf-stable product moisture range for natural product is 14% to 18% H₂O, sulfited is 22% to 26% H₂O
- All-natural fruit ingredient
- Excellent neutral base for other color and flavor profiles
- Various sizes and shapes for different piece identities
- Low-cost transportation and storage
- Easy handling and reduced labor costs
- Low-cost alternative to fresh or frozen apples
- Water activity 0.43 to 0.85 depending on application needs
- Dried apples do not count as added sugar under the new labeling guidelines

Color Preservation
Evaporated Apples are available with sodium sulfite, natural (no treatment to preserve color), or treated with ascorbic or erythorbic acid and citric acid blend of antioxidants.

Note: Actual product color may vary. Some items are custom formulated and may require Minimum Production Runs.
Low Moisture Apple Dices

Low moisture apples are dried to a maximum moisture of 3.5% and are ideal in a variety of shelf-stable applications. These naturally wholesome fruit ingredients are ideal for use in bakery mixes, cereals, low water activity fillings, snack bars, and RTE snacks.

- 3/4” x 3/8” x 3/8” Low Moisture Apple Dice
  - Natural - No Treatment to Preserve Color

- 1/4” x 1/4” x 1/4” Low Moisture Apple Dice
  - Natural - No Treatment to Preserve Color

- 3/8” x 3/8” x 3/8” Low Moisture Apple Dice
  - Color Preserved with Sulfur Alternative

- 1/2” x 3/8” x 1/4” Low Moisture Apple Dice
  - Color Preserved with Sulfur Alternative

Benefits of Our Low Moisture Air Dried Apples:

- All-natural fruit ingredient
- Shelf-stable in a variety of applications
- Excellent fat replacer and moisture extender
- Various sizes and shapes for different piece identities
- Excellent neutral base for other fruit colors and flavors
- Low-cost transportation and storage
- Moisture below 3.5%
- Tenderized dice are formulated to provide faster rehydrating
- Viscosity controlled by customer for maximum versatility - just add water for easy reconstitution

For product specifications visit treetopingredients.com
Low Moisture Puffed Apples provide the texture of freeze-dried fruits without the high cost. Tree Top’s unique process in puffing apple pieces forces air into the cellular structure causing each cell to puff up, which gives it a crisp, crunchy texture.

Note: Actual product color may vary. Some items are custom formulated and may require Minimum Production Runs.
Low Moisture Apple Granules & Powders

- 4 Mesh Low Moisture Apple Granule
  Natural - Blueberry Colored and Flavored
  No Treatment to Preserve Color
- 4 Mesh Low Moisture Apple Granule
  Natural - Strawberry Colored and Flavored
  Color Preserved with Sodium Sulfite
- 8 Mesh Low Moisture Air Dried Apple Granule
  Natural - No Treatment to Preserve Color

Low Moisture Apple Applications:
- Cookies and cookie fillings
- Cakes and pies
- Fruit and granola bars
- Toaster pastry fillings
- Dried fruit snacks
- Hot and ready-to-eat cereals
- Moisture extenders in doughs
- Sauces
- Dried salad seasonings
- Dry cake, muffin, or pancake mixes

16 Mesh Low Moisture Air Dried Chop
Apple Powder with Peel
Natural - No Treatment to Preserve Color
20 Mesh Low Moisture Apple Powder
Color Preserved with Sodium Sulfite

For product specifications visit treetopingredients.com
Drum Dried Apple & Pear

Flake Powders

Dried fruit purées made with 100 percent natural fruit ingredients are drum dried into inexpensive versatile powders. Dried fruit purées can be custom designed with minimum volume requirements; simply choose any fruit or any blend of fruits. Purées may also be colored and flavored with natural or artificial additives to meet your specific needs.

Maximum Moisture Levels
1.0% to 3.5% H₂O
0.15 to 0.26 maximum water activity

Note: Actual product color may vary. Some items are custom formulated and may require Minimum Production Runs.
Drum Dried Fruit

Benefits of Our Drum Dried Fruit Flake Powders:

- Nice fruit flavor
- Excellent fat replacer and moisture extender
- Viscosity controlled by customer for maximum versatility-just add water for easy reconstitution
- Shelf-stable and long lasting in ambient temperatures
- Easily blended into dough matrix or filling
- Products can be labeled “made with real fruit”
- Low-cost transportation and storage
- Moisture below 3.5%
- Generally use 5 parts water by weight to 1 part powder
- Fruit flake powders do not count as added sugar under the new labeling guidelines

Apple or pear can be blended with characterizing fruit to lower ingredient costs.

For product specifications visit treetopingredients.com
Consumers increasingly concerned with health and wellness are choosing products boasting of healthful ingredients. Fruit is becoming one of the most popular vehicles for delivering a wide range of health benefits. Tree Top’s single strength fruit purées are minimally processed, and provide a natural color boost and an enhanced flavor to both food and beverage applications alike. Discover the wide range of natural advantages Tree Top’s products can bring to your next project.

**Note:** Actual product color may vary. Some items are custom formulated and may require *Minimum Production Runs*. For organic options please call us at 800.367.6571 ext 1435
Benefits of Using Tree Top’s Single Strength Fruit Purées:

- Minimally processed single strength fruit purées retain a better color, flavor and nutrition profile
- Made with whole fruit, purées provide additional fiber
- ½ cup of single strength purée = 1 fruit equivalent
- Products can be labeled “made with real fruit” to add that health halo image consumers desire
- Available in pasteurized frozen or in an aseptic form
- Proven traceability program
- High food safety and reliability scores
- Wide array of organic and conventional products
- A current supplier of fruit purées to the baby food industry
- Tree Top, as a grower owned fruit cooperative has been transforming ugly fruit into value-added ingredients for 55 plus years

Purée Applications:

- Confections
- Dressings and sauces
- Fruit snacks and bars
- Ice creams and yogurts
- Smoothies
- Sorbets and granitas
- Bakery
- Beverages
- Baby foods

For product specifications visit treetopingredients.com
Concentrated Purées

Concentrated fruit purées are processed similar to single strength purées. Fresh fruit is washed, scrubbed, sorted, blanched, and processed through finishers. After the purée passes through the finishers, the water is then extracted from the product, concentrating it up to four times the brix level before being packaged aseptically or frozen.

Our product development team, with backgrounds in food science, chemistry, microbiology, nutrition, sensory, culinary and engineering, can work confidentially with you to create a vast array of food and beverage products.

Note: Actual product color may vary. Some items are custom formulated and may require Minimum Production Runs.
Benefits of Using Tree Top’s Concentrated Fruit Purées:

- Economical for shipping and storage
- Consistent brix level
- Easily achieved desired consistency and brix level with water dilution at customer’s facility
- Both concentrated and single strength purées do not count as added sugar under the new labeling guidelines

Quality Concentrated Fruit Purées Include:

- Apple concentrated purée
- Apricot concentrated purée
- Blackberry concentrated purée
- Blueberry concentrated purée
- Cherry concentrated purée
- Concord Grape concentrated purée
- Mango concentrated purée
- Peach concentrated purée
- Pear concentrated purée
- Raspberry concentrated purée
- Strawberry concentrated purée

For product specifications visit treetopingredients.com
Formulated Fruit Preps

Formulated fruit preps are custom developed to meet your specific product needs. With a team of skilled product developers and several different processing methods including aseptic or pasteurization, we can produce fruit ingredient solutions to meet your color, viscosity, flavor, texture, and technical requirements.

Blueberry Fruit Base
Concord Grape Fruit Base
Boysenberry Fruit Base
Dark Sweet Cherry Fruit Base
Cherry Fruit Base

Note: Actual product color may vary. Some items are custom formulated and may require Minimum Production Runs.
**Formulated Fruit Preps**

Tree Top’s fruit preps are specially blended for the dairy and frozen novelty industry. Depending on your application needs, our preps are typically formulated with a combination of whole fruit, purées, sweeteners, and stabilizers.

**Benefits of Using Tree Top’s Formulated Fruit Preps:**

- Tree Top offers resources to take your idea from concept to reality
- Products are specifically formulated to meet your unique needs
- Fresher flavor, excellent piece identity, and nice color
- Preferred choice of multiple leading brands for great taste and outstanding quality

For product specifications visit treetopingredients.com
Quality Formulated Fruit Preps Include:

- Apple variegates and bases
- Pear variegates and bases
- Peach variegates and bases
- Apricot variegates and bases
- Strawberry variegates and bases
- Raspberry variegates and bases
- Blueberry variegates and bases
- Blackberry variegates and bases
- Tropical variegates and bases (mango, guava, etc.)
- Other exotics
- Custom variegates and bases

Note: Actual product color may vary. Some items are custom formulated and may require Minimum Production Runs.
Clarified Fruit Juice Concentrates

Tree Top offers premium fruit juice concentrates, which make excellent sweeteners for baked goods, cereals, candies, and many other food items. The same attention to detail and superior standards that go into our own brand — Tree Top — go into the ingredients we offer our customers. Plus, you’ll receive the added value of technical support from an experienced research and development team to work closely with you to tailor our concentrates to your needs. Over the years, our portfolio of fruit offerings has expanded beyond apples and includes pears, strawberries, cherries, plums, blackberries, Concord grapes, raspberries, and peaches… just about any fruit you can name is available through Tree Top, or Northwest Naturals, a wholly-owned subsidiary.

Blackberry, raspberry, blueberry and strawberry juice concentrates require a minimum annual production run of 3,600 gallons

For product specifications visit treetopingredients.com
Why Choose Fruit Juice Concentrates?

- Allows your product to be labeled as containing “real fruit juice”
- Serves as an alternative sweetener, replacing sugar or corn syrup, although juice concentrate does count as added sugar in most applications
- Contributes various flavors and color profiles, making them extremely versatile
- Fruit juice can be added to your formula as a way to adjust the pH

**Specialty Concentrates**

Northwest Naturals, a wholly-owned subsidiary of Tree Top, Inc., offers the following concentrate products: Fruit juice concentrate WONFs, juice WONFs with purée, organic concentrate WOOFs, granita, smoothie, juice bar, sorbet and sherbet bases, essences, and various juice sweeteners. We can custom clarify tropical purées, such as mango, guava, passion fruit, and banana into a juice concentrate form.

*Note: Actual product color may vary. Some items are custom formulated and may require *Minimum Production Runs.*
Stock vs. Custom Formulation

Tree Top offers a variety of ingredient products that are considered off the shelf or standard items. These items are typically available year-round and require less minimum order quantities than custom formulated items.

We understand your ingredient requirement may need to be specifically formulated for your unique application. As your fruit solutions' provider, we welcome these opportunities and our product development team stands ready to create your custom formulations.

**Custom fruit solutions are subject to larger ‘minimum’ order quantities.**

<table>
<thead>
<tr>
<th>Product</th>
<th>Minimum Quantity Finished Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dried Apples</td>
<td>20,000 lbs.</td>
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<tr>
<td>Fruit Powders</td>
<td>10,000 lbs.</td>
</tr>
<tr>
<td>Fruit Sensations®</td>
<td>10,000 lbs.</td>
</tr>
<tr>
<td>Puffed Apples</td>
<td>20,000 lbs.</td>
</tr>
<tr>
<td>Single Strength Purées Pasteurized Frozen</td>
<td>20,000 lbs.</td>
</tr>
<tr>
<td>Single Strength Purées Aseptic</td>
<td>32,000 - 40,000 lbs. (depending on fruit type)</td>
</tr>
<tr>
<td>Concentrated Purées Aseptic</td>
<td>35,000 - 50,000 lbs. (depending on fruit type)</td>
</tr>
<tr>
<td>Fruit Preps</td>
<td>20,000 lbs.</td>
</tr>
<tr>
<td>Juice Concentrates</td>
<td>5,000 gallons</td>
</tr>
<tr>
<td>Juice Blends</td>
<td>3,500 gallons</td>
</tr>
</tbody>
</table>
Packaging Options

- **Juice Concentrates**
  - Plastic Pails
  - Drums
  - Totes
  - 4,200 Gal. Tanker Truck
  - 17,000 Gal. Rail Tanker

- **Purée Concentrates**
  - ASEPTIC
    - 55 Gal. Bag’n Drums
    - 275 Gal. Bags’n Totes
  - PASTEURIZED FROZEN
    - 5 Gal. Pails
    - 55 Gal. Drums

- **Formulated Fruit Preps/Bases & Single Strength Purées**
  - ASEPTIC
    - 5 Gal. Bag’n Boxes
    - 55 Gal. Bag’n Drums
    - 275 Gal. Bags’n Totes
  - PASTEURIZED FROZEN
    - 5 Gal. Pails
    - 55 Gal. Drums

- **Dried Apples**
  - 15-50 lb. Bag’n Cases
  - Bags’n Totes
  - Bulk Totes

- **Drum Dried Fruits**
  - 30-50 lb. Bag’n Cases
  - 1,050 lb. Totes
  - Bags’n Totes
  - Super Sacks