

Fruit Ingredients

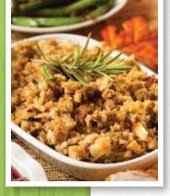
Real France



Product Catalog

Dried, Fruit Preps, Purées and Concentrates

More fruits, more forms, more possibilities.™



Regular Moisture **Apples**

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.



1/2" x 3/8" x 1/4" Regular Moisture Apple Color Preserved with Sodium Sulfite



1/4" x 1/4" x 1/4" Regular Moisture Apple Natural - No Treatment to Preserve Color

34" x 1/2" x 1/4" Regular Moisture Apple Natural - No Treatment to Preserve Color



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



3%" x 3%" x 3%" Regular Moisture AppleColor Preserved with Sodium Sulfite



Regular Moisture Apples

Benefits of Our Regular Moisture Apples:

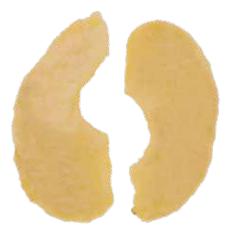
- Shelf-stable product moisture range for natural product is 14% to 18% H₂O, sulfited is 22% to 26% H₂O
- All-natural fruit ingredient
- Excellent neutral base for other color and flavor profiles
- Various sizes and shapes for different piece identities
- Low-cost transportation and storage
- Easy handling 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.



¹/₈" Grind Regular Moisture Apple Natural - No Treatment to Preserve Color



Regular Moisture Apple Wedges Natural - No Treatment to Preserve Color



¹/₈" Chip Regular Moisture Apple Color Preserved with Sodium Sulfite



1/4" x 1/4" x 1/4" Regular Moisture Dice with Peel Natural -No Treatment to Preserve Color

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.



3/8" 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



 $^{1\!\!/_2"}$ x $^{3\!\!/_8"}$ x $^{1\!\!/_4"}$ Low Moisture Apple Dice Color Preserved with Sulfur Alternative



3/4" x 1/2" x 1/8" Low Moisture Apple Dice Color Preserved with Sulfur

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



Low Moisture Apples Puffed

Low Moisture Puffed Apples provide the texture of freezedried 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.



¾" x ¾" x ¾" Low Moisture Puffed Apple Dice Unpeeled Color Preserved with Sodium Sulfite



⅛" x 1" x NEC Low Moisture Puffed Apple Slices Unpeeled Natural - No Treatment to Preserve Color



1/8" x 1" x NEC Low Moisture Puffed Apple Slices Unpeeled Color Preserved with Sodium Sulfite Cinnamon Flavored

Low Moisture Apples **Rolled Flake**



3%" x 14" x 14" Low Moisture Tenderized/Rolled Apple Flake Natural - Strawberry Colored and Flavored No Treatment to Preserve Color



3/8" x 1/4" x 1/4" Low Moisture Tenderized/Rolled Apple Flake Natural - Peach Colored and Flavored No Treatment to Preserve Color



3/8" x 1/4" x 1/4" Low Moisture Tenderized/Rolled Apple Flake Natural - No Treatment to Preserve Color

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



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.





20 Mesh Organic Apple Flake Powder Natural - No Treatment to Preserve Color



8 Mesh Pear Flake Powder Natural - No Treatment to Preserve Color



20 Mesh Apple Flake Powder Natural - No Treatment to Preserve Color



8 Mesh Apple Flake Powder Natural - No Treatment to Preserve Color



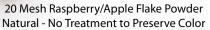
12 Mesh Apple Flake Powder Natural - No Treatment to Preserve Color

Maximum Moisture Levels

1.0% to 3.5% H_2O 0.15 to 0.26 maximum water activity

Drum Dried Fruit Flake Powders



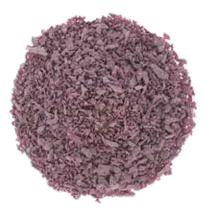




8 Mesh Strawberry/Apple/Pear Flakes Natural - No Treatment to Preserve Color

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



8 Mesh Grape Flake Powder Natural - No Treatment to Preserve Color



35 Mesh Cranberry/Apple Flake Powder Natural - No Treatment to Preserve Color

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

Single Strength **Purées**



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

Blackberry Purée

Apple Purée

Apricot Purée

Blueberry Purée

Single Strength **Purées**

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
- ¹/₂ 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





Peach Cling & Freestone Purée



Purée Applications:

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

Pear Purée



Red Raspberry Purée



Plum Purée

Strawberry Purée



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.



Blackberry Purée 30 BRIX



Blueberry Purée 28 BRIX



Red Tart Cherry Purée 30 BRIX



Concord Grape Purée 45 BRIX

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

Apricot Purée 32 BRIX

Apple Purée 32 & 38 BRIX

- Page 11 -

Concentrated **Purées**

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





Cling & Freestone Peach Blend Purée 32 BRIX



Plum Purée 32 BRIX



Strawberry Purée 28 BRIX



Pear Purée 32, 38 & 45 BRIX

Mango Purée 28-30 BRIX

Raspberry Purée 28 BRIX

Formulated Fruit Preps

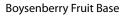
Formulated fruit preps are custom developed to meet your specific product needs. With a team of skilled product developers and several different processing methods including aseptic or pasteurization, we can produce fruit ingredient solutions to meet your color, viscosity, flavor, texture, and technical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





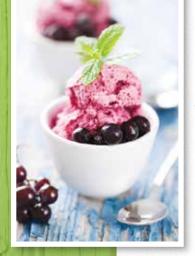
Blueberry Fruit Base

Concord Grape Fruit Base









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



Pomegranate Fruit Base



Raspberry Fruit Base



Strawberry 4+1 Fruit Purée Base



Red Raspberry Variegate Fruit Base

- Page 14 -

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



Mango Fruit Base

Strawberry 4+1 Slice Stabilized

Tangerine Fruit Base



Strawberry Variegate Fruit Base



- Beverage bases
- Sorbet bases
- Ice cream bases
- Stabilized bakery fillings
- Variegates
- Yogurt and other dairy bases
- Fruit leathers
- Fruit snacks

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

- Page 15 -

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



Concord Grape Juice Concentrate 68 BRIX

Apple

Juice Concentrate

70 BRIX

Blackberry Juice Concentrate 65 BRIX

Why Choose **Fruit Juice Concentrates?**



NORTHWEST

NATURALS

- 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.



CUSTOM

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.

Product	Minimum Quantity Finished Product
Dried Apples	20,000 lbs.
Fruit Powders	10,000 lbs.
Fruit Sensations®	10,000 lbs.
Puffed Apples	20,000 lbs.
Single Strength Purées Pasteurized Frozen	20,000 lbs.
Single Strength Purées Aseptic	32,000 - 40,000 lbs. (depending on fruit type)
Concentrated Purées Aseptic	35,000 - 50,000 lbs. (depending on fruit type)
Fruit Preps	20,000 lbs.
Juice Concentrates	5,000 gallons
Juice Blends	3,500 gallons



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

<u>ASEPTIC</u> 5 Gal. Bag'n Boxes 55 Gal. Bag'n Drums 275 Gal. Bags'n Totes PASTEURIZED FROZEN 5 Gal. Pails 55 Gal. Drums

BYNUM FOOD GRADE ONLY

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



Fruit Ingredients

Tree Top, Inc. • P.O. Box 248 • 220 E. Second Ave. • Selah, WA 98942 treetopingredients.com • 509.698.1435 or 1.800.367.6571 ext. 1435 Issue Date: MAY 2018

