

Fruit Juice, California-Type Red Grape, Concentrate

Revised 2018

Storage Conditions

Temperature	0°F (-17.8°C)	28-40°F (-2.2 to 4.4°C)
Storage Period	3 years	1 year

The loss of quality attributes and nutritional loss in red grape frozen concentrate is negligible provided it remains at 40°F (4.4°C) or below. The color pigmentation in California-type red grape concentrate is extremely concentrated. With reasonable storage control, the concentrate will maintain deep red-ruby hues for long periods of time. The flavor of California red concentrate is not as pronounced as the flavor developed by the Concord blue-purple grape variety.

Red grape juice concentrate is normally shipped in bulk truck or rail tankers as well as in 55-gal (208-L) drums. Shipping temperatures and storage temperatures should be maintained below 40°F (4.4°C).

Freezing of concentrates may result in additional precipitation of tartaric acid and dextrose in the drum product. Issues with graininess could occur unless the product is reheated to at least 120°F (49°C) in use or is thoroughly mixed when used in batching.

Packaging

Modern packaging of purees and puree concentrates utilizes some form of aseptic totes. There are a number of different styles, including stainless steel totes that can be sterilized and reused; reusable plastic totes with disposable aseptic liners; or large (275 to 300 gallon) fiberboard disposable totes. It is important to note that none of these container types are designed for frozen use. Freezing and thawing destroys the integrity of the disposable fiberboard totes, and the plastics can become brittle and/or break. Stainless steel totes can burst with freezing due to internal gas pressure. As a result, containers should be stored in either ambient or refrigerated areas using similar storage length as drums under the same conditions. This limits their use to aseptic products. After opening, the items either need to be used immediately or transferred into another container for refreezing and storage.

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