



United States
Department of
Agriculture

FV317-CS1

April 2004

Marketing and
Regulatory
Programs

Agricultural
Marketing
Service

Washington, DC
20250

Commodity Specification

Concentrated Fruit Juice For Manufacturing



Table of Contents

I. GENERAL 2

A. U.S. Standards..... 2

B. Exceptions to U.S. Standards..... 2

C. Product Origin 2

D. Manufacturing Practices 3

E. Packing Season 4

F. Grades of Concentrated Fruit Juice for Manufacturing..... 4

G. Fill of Container 4

H. Packing, Labels and Packaging 4

 A. Concentrated Orange Juice for Manufacturing: Tanker5

 B. Concentrated Orange Juice for Manufacturing: Drums5

I. Palletization Requirements 7

II. COMMODITY SPECIFICATIONS 7

III. INSPECTION AND CHECKLOADING..... 8

 A. Requirements..... 8

 B. Certification..... 8

 C. Procedures 8

IV. FAILURE TO MEET SPECIFICATIONS 9

V. EXHIBITS 10

 Exhibits 1 thru 1-2 Table for Calculating Payment Based on Brix/Volume
 Delivered Basis10-12

I. General**A. U.S. Standards**

Concentrated fruit juice for manufacturing produced under this Commodity Specification must meet the requirements specified in the applicable United States Standards for Grades of Concentrated Fruit Juice for Manufacturing (U.S. Standards) effective on the date of the Invitation for Offers to Sell (Invitation). The U.S. Standards are published separately (7 C.F.R. part 52) and are incorporated herein and made a part of this Commodity Specification.

B. Exceptions to U.S. Standards

Exceptions to the U.S. Standards for the Department of Agriculture (USDA) concentrated fruit juice for manufacturing purchases are found in Section II, Individual Product Specifications, of this document. Additional exceptions may be specified in the applicable Invitation. Any exceptions contained in the applicable Invitation shall have precedence over the requirements contained herein, for that Invitation only.

C. Product Origin

1. Concentrated fruit juice for manufacturing delivered pursuant to this Commodity Specification shall have originated from crops that have been 100 percent grown, processed, and packed in the United States, its territories or possessions, the Commonwealth of Puerto Rico, or the Trust Territories of the Pacific Islands, (hereinafter referred to as the United States). See Section I.F. of Announcement FV-317.
2. If the contractor handles any commodity originating from sources other than the United States, the contractor must have a written plan to segregate the commodity. This segregation plan will include an identification and record system for all commodities to ensure they are completely segregated and cannot be used to fulfill contracts awarded by USDA. Such segregation plan must be made available, within 10 calendar days of contract award, to representatives of the Agricultural Marketing Service (AMS).
3. The contractor must maintain positive written documentation records evidencing 100 percent domestic origin down to the grower level. Contractors must also ensure that the documentation provided by any sub-contractors demonstrates the same level of traceability. The burden of proof of compliance is on the contractor. Documentation may include load or warehouse storage receipts for raw product (i.e., bin tags), product blend (formulation) records, product coding explanations, finished product warehousing records, shipping or payment records, or other documentation or evidence that clearly establishes the product's domestic origin.

4. Contractors must provide the domestic origin certification and supporting documentation records to representatives of the AMS Fruit and Vegetable Programs, Processed Products Branch (USDA Grader) when requesting inspection service. USDA Graders will select and review at least one code for each contract to determine compliance with the Agency's domestic origin requirements.
5. Such records must be available for review by the Government in accordance with Article 76 of USDA-1. In the event of an audit, AMS auditors will examine as many codes as is necessary to verify compliance.
6. Self-certifications by contractors and sub-contractors will not be accepted.
7. Failure to observe this requirement may lead to suspension or debarment, contract termination, and penalties at Title 18, Section 1001 of the U.S. Code concerning falsification of information.

D. Manufacturing Practices

1. Good Manufacturing Practices

All concentrated fruit juice for manufacturing must be produced in accordance with the Food and Drug Administration's Good Manufacturing Practices (21 C.F.R., Part 110).

2. Plant Survey or Plant Systems Audit (PSA)

Successful bidders are required to undergo an annual plant survey or PSA.

The primary purpose of conducting a plant survey or PSA is to ensure that the contractor produces products in a clean, sanitary environment. Contractors are required to maintain process operations records that are sufficiently detailed as to allow the Processed Products Branch (PPB), AMS, Fruit and Vegetable Programs, to determine past and current sanitation practices.

The AMS, Fruit and Vegetable Programs, PPB will conduct the plant survey/PSA. PPB personnel will follow the procedures found in the most current version of PPB File Code 159-A-1, Plant Sanitation or the most current procedure for PSA. Contractors must provide the Contracting Officer with a copy of an acceptable completed plant survey/PSA. An acceptable plant survey/PSA will be valid for one year.

Contractors who have a PPB inspector in-plant through a contract service agreement will be considered to have met the plant survey/PSA requirement, since a plant survey/PSA is a prerequisite to a contract service agreement.

Similarly, contractors who have completed a PPB plant survey/PSA for any other purpose within one year of the award will also be deemed to have satisfied this requirement.

Completion of the plant survey/PSA prior to the submission of a bid is suggested, but not required. If a firm submitting a bid receives an award, and has not had a plant survey/PSA within the past year, it must provide proof of an acceptable plant survey/PSA not later than 10 business days from the date of the contract. Failure to provide this documentation within the proper time frame may result in the contract being terminated for default.

E. Packing Season

All concentrated fruit juice for manufacturing must be from the current packing season/crop year, unless otherwise specified in the applicable Invitation.

F. Grades of Concentrated Fruit Juice for Manufacturing

Concentrated fruit juice for manufacturing must be U.S. Grade A (as defined in the U. S. Standards) unless otherwise specified in Section II, Individual Product Specifications, herein or the applicable Invitation.

G. Fill of Container

1. Contractor must meet the fill of container for the product as specified in the applicable U.S. Standards unless otherwise indicated herein. Each container must be filled as full as practicable. The product must occupy at least 90 percent of the container.
2. The average fill of container must meet the fill of container as printed on the label.

H. Packing, Labels and Packaging

The containers, labels and case markings shall meet the United States Standards for Condition of Food Containers (7 CFR Part 42).

Storage of concentrated fruit juice for manufacturing will be at 0 degrees Fahrenheit or below. No acceptance of product will be made at destination above 30 degrees Fahrenheit.

Frozen products shall be packed in primary containers of food grade quality in Compliance with the Food Additives Regulations of the Federal Food and Drug Administration.

The primary containers must be suitably code-marked so that the product can be identified with related inspection certificates.

A. CONCENTRATED ORANGE JUICE FOR MANUFACTURING:
TANKER TRUCKS

Origin: 100% Domestic Origin Required

Style: Unsweetened

Color: Minimum 37 score points

Flavor: Minimum 37 score points

Brix Value/Acid Ratio: Minimum 14.0:1 / Maximum 18.0:1

Fill Requirement: Minimum 31,200 pounds solid
(62.5 – 65.5 degrees brix)

Recoverable Oil:
(% by Volume) Minimum 0.015

Unit Size: Tanker: Minimum of 31,200 pounds
Solids **(if dissolved at 16,800 pounds
of water = 48,000 pounds a tanker)**

Inspection: USDA in-plant inspection required.

CERTIFICATION: AMS Certificate of Quality and
Condition for each tanker.

Tanker seals shall be used in
accordance with USDA procedures.

Substitutions at reconstruction
processing plants must be inspected and
certified by USDA to meet FV-317
quality requirements.

B. CONCENTRATED ORANGE JUICE FOR MANUFACTURING:
DRUMS

Origin: 100% Domestic Origin Required

Style: Unsweetened

Commodity Specification

Concentrated Fruit Juice For Manufacturing

Color:	Minimum 37 score points
Flavor:	Minimum 37 score points
Brix Value/Acid Ratio:	Minimum 14.0:1 / Maximum 18.0:1
Fill Requirement:	371 Pounds Solids per Drum (62.5 – 65.5 degrees brix)
Recoverable Oil: (% by Volume)	Minimum 0.015
Unit Size:	Truck: 26,712 Pounds Solids (72 drums @ 371 plus (+) or minus (-) 1 pound solids).

Insert two polyethylene liners 2 millimeter thickness. New or reconditioned drums and lids required.

Labeling:	Requirements of Drum Tags Name and Address of Company
	<ol style="list-style-type: none">1. Drum Number2. Brix Value /Acid Ratio3. Brix to nearest tenth of a degree4. Grade and Date Packed5. Net Weight6. Tare7. Gross Weight

- Printed Tag Labeled, “Concentrated Orange Juice for Manufacturing”.
- Copy of Drum Tag is to be inserted inside Drum showing identical Information shown above.

Inspection:	USDA in-plant inspection required.
-------------	------------------------------------

<u>CERTIFICATION:</u>	AMS Certificate of Quality and Condition.
-----------------------	---

Substitutions at reconstruction processing plants must be inspected and certified by USDA to meet FV-317 quality requirements.

Reconditioned drums are acceptable.

The construction of shipping containers shall be adequate to with-stand normal refrigerated shipping and cold storage and acceptable by common carriers for safe transportation to destinations.

Both tanker and drum trucks will be paid on a pounds per solid basis.

Payments: Payments will be based on a brix/volume delivered basis, i.e. assuming a 65 degree brix, payment for delivery of 48,000 lbs delivered would be calculated as follows:

$$48,000 \div 10.977 \text{ (weight -in lbs- per U.S. gallon in air @ 20 degrees Celsius)*} = 4,372.78 \text{ gallons}$$

$$\begin{aligned} &4,372.78 \times 7.135 \text{ (lbs of sucrose per gallon in air)*} \\ &= 31,199.78 \text{ lbs of solids} \\ &31,199.78 \times \text{Quoted Price Per Lb of Solids} \\ &= \text{Amount Payable} \end{aligned}$$

* See Exhibits 1 thru 1-2.

I. Palletization Requirements – (For drums only)

1. Pallets

Product must be on 48 X 40 inch, non-reversible, flush stringer, and partial four-way entry. New pallets must be good quality wood. Used pallets must be No.1 hardwood or its equivalent in new softwood. If pallet exchange is desired, the contractor shall arrange for pallet exchange with consignees. USDA is in no way responsible for arrangement of pallet exchange.

2. Unitization

Each delivery unit of concentrated fruit juice for manufacturing in drums must be unitized. The palletized product must be loaded in the conveyance in such a way that will prevent shifting and damage to the containers of the product. The pallet shall be banded to secure the drums.

II. Commodity Specifications

See Sections I (A) and (B) above.

Grade – The grade of concentrated orange juice for manufacturing delivered under this Announcement shall meet the descriptions of U.S. Grade A, unsweetened,

concentrated orange juice for manufacturing.

III. Inspection and Checkloading

A. Requirements

Tankers are to be inspected on the day of shipping.

Drums – USDA inspection shall be made during on-line production of the product.

For Drums Only – Representatives of the AMS, Fruit and Vegetable Programs, Processed Products Branch (USDA Grader) must perform the inspection and checkloading required by Articles 54 and 55 of USDA-1.

The cost of inspection, samples taken for inspection, mailing of review samples submitted for evaluation, and any chemical analysis required for testing shall be for the account of the Contractor.

Inspection of concentrated fruit juice for manufacturing (drums) must be performed not more than 60 days prior to shipment. Whether each lot offered meets the product and container requirements of the contract must be determined on the basis of representative sample units. Representative sample units will be graded according to the Regulations Governing Inspection and Certification of Canned Fruits and Vegetables and Related Products (7 C.F.R. part 52), and United States Standards for Condition of Food Containers (7 C.F.R. part 42.140), effective on the date of the Invitation.

B. Certification

Subject to Articles 54 and 55 of USDA-1, the acceptability of the quality, volume, packaging, and checkloading of the product must be evidenced by certificates issued by the USDA Grader.

No product shall be shipped unless the USDA Grader informs the Contractor that a designated lot is acceptable. Notice by the USDA Grader that a designated lot scheduled for shipment does not meet requirements of the contract shall constitute rejection of such lot.

C. Procedures

The Contractor must give the USDA Grader at least 7 business days advance notice when scheduling inspection service.

IV. Failure to Meet Specifications

Any lot that fails applicable specifications prescribed herein, as determined by the USDA Grader, will be rejected as not acceptable for delivery. If any lot of concentrated fruit juice for manufacturing fails to meet the product or packaging requirement, the Contractor may request in writing that USDA accept delivery of the lot. USDA may, **at its option**, accept delivery, provided that the purchase price is the contract price less the discount, to be determined by the Contracting Officer, depending upon the reason(s) for the failure to meet specifications.



Suzanne Rigby
Chief, Commodity Procurement Branch
Fruit and Vegetable Programs
Agricultural Marketing Service

V. Exhibits

Exhibit 1

Degrees Brix or Per Cent By Weight Sucrose	Apparent Specific Gravity 20°/20°C.	Weight Per Liter In Air at 20°C. (Grams)	Grams of Sucrose Per Liter In Air	Weight Per U.S. Gallon In Air at 20°C. (Pounds)	Pounds of Sucrose Per Gallon In Air
60.0	1.28908	1285.4	771.27	10.727	6.436
.1	.28966	1286.0	772.90	.732	.450
.2	.29025	1286.6	774.54	.737	.464
.3	.29084	1287.2	776.18	.742	.477
.4	.29143	1287.8	777.82	.747	.491
.5	.29203	1288.4	779.47	.752	.505
.6	.29262	1289.0	781.12	.757	.519
.7	.29321	1289.6	782.77	.762	.533
.8	.29380	1290.2	784.41	.767	.546
.9	.29439	1290.8	786.06	.772	.560
61.0	1.29498	1291.3	787.71	10.777	6.574
.1	.29559	1291.9	789.37	.781	.587
.2	.29618	1292.5	791.02	.786	.601
.3	.29677	1293.1	792.68	.791	.615
.4	.29736	1293.7	794.33	.796	.629
.5	.29796	1294.3	795.99	.801	.643
.6	.29855	1294.9	797.65	.806	.656
.7	.29915	1295.5	799.21	.811	.670
.8	.29975	1296.1	800.97	.816	.684
.9	.30034	1296.7	802.64	.821	.698
62.0	1.30093	1297.3	804.31	10.826	6.712
.1	.30153	1297.9	805.97	.831	.726
.2	.30212	1298.5	807.64	.836	.740
.3	.30273	1299.1	809.31	.841	.754
.4	.30334	1299.7	810.99	.846	.768
.5	.30393	1300.3	812.66	.851	.782
.6	.30453	1300.9	814.34	.856	.796
.7	.30513	1301.5	816.01	.861	.810
.8	.30573	1302.1	817.69	.866	.824
.9	.30633	1302.7	819.37	.871	.838
63.0	1.30694	1303.3	821.05	10.876	6.852
.1	.30754	1303.9	822.73	.881	.866
.2	.30815	1304.5	824.42	.886	.880
.3	.30875	1305.1	826.10	.891	.894

Exhibit 1-1

Degrees Brix or Per Cent By Weight Sucrose	Apparent Specific Gravity 20°/20°C.	Weight Per Liter In Air at 20°C. (Grams)	Grams of Sucrose Per Liter In Air	Weight Per U.S. Gallon In Air at 20°C. (Pounds)	Pounds of Sucrose Per Gallon In Air
63.4	1.30936	1305.7	827.79	10.896	6.908
.5	.30994	1306.3	829.47	.901	.922
.6	.31055	1306.9	831.16	.906	.936
.7	.31117	1307.5	832.85	.911	.950
.8	.31117	1308.1	834.55	.916	.964
.9	.31237	1308.7	836.24	.921	.979
64.0	1.31297	1309.3	837.93	10.926	6.993
.1	.31359	1309.9	839.83	.931	7.007
.2	.31418	1310.5	841.33	.936	7.021
.3	.31479	1311.1	843.03	.941	7.035
.4	.31540	1311.7	844.73	.946	7.049
.5	.31600	1312.3	846.43	.951	7.063
.6	.31661	1312.9	848.13	.956	7.078
.7	.31723	1313.5	849.84	.961	7.092
.8	.31784	1314.1	851.55	.967	7.107
.9	.31845	1314.7	853.26	.972	7.121
65.0	1.31905	1315.3	854.96	10.977	7.135
.1	.31966	1315.9	856.68	.982	.149
.2	.32028	1316.5	858.39	.987	.164
.3	.32089	1317.1	869.11	.992	.178
.4	.32150	1317.8	861.82	.997	.192
.5	.32210	1318.4	863.54	11.002	.206
.6	.32271	1319.0	865.25	11.007	.210
.7	.32332	1319.6	866.97	11.012	.235
.8	.32393	1320.2	868.69	11.017	.249
.9	.32455	1320.8	870.42	11.022	.263
66.0	1.32516	1321.4	872.14	11.027	7.278
.1	.32577	1322.0	873.86	.033	.293
.2	.32638	1322.6	875.58	.038	.307
.3	.32699	1323.3	877.31	.043	.322
.4	.32759	1323.9	879.03	.048	.336
.5	.32820	1324.5	880.77	.053	.350
.6	.32884	1325.1	882.50	.058	.365

R=95%

Commodity Specification

Concentrated Fruit Juice For Manufacturing

Exhibit 1-2

Degrees Brix or Per Cent By Weight Sucrose	Apparent Specific Gravity 20°/20°C.	Weight Per Liter In Air at 20°C. (Grams)	Grams of Sucrose Per Liter In Air	Weight Per U.S. Gallon In Air at 20°C. (Pounds)	Pounds of Sucrose Per Gallon In Air
66.7	1.32945	1325.7	884.24	11.063	7.379
.8	.33007	1326.3	885.98	.068	.393
.9	.33068	1326.9	887.71	.073	.408
67.0	1.33129	1327.6	889.44	11.079	7.423
.1	.33192	1328.2	891.19	.084	.437
.2	.33254	1328.8	892.94	.089	.452
.3	.33315	1329.4	894.68	.094	.466
.4	.33377	1330.0	896.42	.099	.481
.5	.33438	1330.6	898.17	.104	.495
.6	.33500	1331.3	899.92	.110	.510
.7	.33562	1331.9	901.67	.115	.525
.8	.33625	1332.5	903.43	.120	.539
.9	.33686	1333.1	905.18	.125	.554
68.0	1.33748	1333.7	906.93	11.130	7.568
.1	.33810	1334.3	908.68	.135	.583
.2	.33872	1335.0	910.44	.140	.597
.3	.33935	1335.6	912.20	.146	.613
.4	.33997	1336.2	913.96	.151	.627
.5	.34059	1336.8	915.72	.156	.642
.6	.34121	1337.4	917.48	.161	.656
.7	.34183	1338.1	919.24	.166	.671
.8	.34245	1338.7	921.01	.172	.686
.9	.34309	1339.3	922.78	.177	.701
69.0	1.34371	1339.9	924.55	11.182	7.716
.1	.34433	1340.6	926.32	.187	.730
.2	.34495	1341.2	928.09	.192	.756
.3	.34558	1341.8	929.86	.198	.760
.4	.34621	1342.4	931.64	.203	.775
.5	.34684	1343.1	933.41	.208	.790
.6	.34746	1343.7	935.19	.213	.804
.7	.34809	1344.3	936.97	.218	.819
.8	.34871	1344.9	938.75	.224	.834
.9	.34934	1345.5	940.53	.229	.849

R=95%