C-C-678C December 10, 1973

SUPERSEDING Int. Fed. Spec. C-C-00678B(AGR-C&MS) September 2, 1970 and Fed. Spec. C-C-678A June 26, 1963

#### FEDERAL SPECIFICATION

#### CREAM, SOUR, CULTURED OR ACIDIFIED

This specification was approved by the Commissioner, Federal Supply Service, General Services Administration, for the use of all Federal agencies.

1. SCOPE AND CLASSIFICATION

1.1 <u>Scope</u>. This specification covers the requirements for sour cream for use by all Federal agencies.

1.2 Classification.

1.2.1 <u>Types and classes</u>. Sour cream covered by this specification shall be of the following types and classes as specified (see 6.2):

Type I	 Cultured (18 percent butterfat minimum).
Class 1 Class 2	Plain. Added optional ingredients.
Type II	 Acidified (18 percent butterfat minimum).
Class l Class 2	Plain. Added optional ingredients.

2. APPLICABLE DOCUMENTS

2.1 The following documents of the issue in effect on date of invitation for bids or request for proposal, form a part of the specification to the extent specified herein:

Federal Standard:

FED-STD-123 - Marking for Domestic Shipment (Civil Agencies).

FSC 8910

(Activities outside the Federal Government may obtain copies of Federal Specifications, Standards, and Handbooks as outlined under General Information in the Index of Federal Specifications and Standards and at the prices indicated in the Index. The Index, which includes cumulative monthly supplements as issued, is for sale on a subscription basis by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

(Single copies of this specification and other Federal specifications required by activities outside the Federal Government for bidding purposes are available without charge from Business Service Centers, at the General Services Administration Regional Offices in Boston, New York, Washington, DC, Atlanta, Chicago, Kansas City, MO, Fort Worth, Denver, San Francisco, Los Angeles, and Seattle, WA.

(Federal Government activities may obtain copies of Federal Specifications, Standards, and Handbooks and the Index of Federal Specifications and Standards from established distribution points in their agencies.)

Military Standards:

MIL-STD-105	-	Sampling Procedures and Tables for Inspection by
		Attributes.
MIL-STD-129	-	Marking for Shipment and Storage.

(Copies of specifications and standards required by suppliers in connection with specific procurement functions should be obtianed from the procuring activity or as directed by the contracting officer.)

**PUBLICATIONS:** 

## U.S. Department of Health, Education and Welfare

Federal Food, Drug, and Cosmetic Act and Regulations Promulgated Thereunder.

Grade A Pasteurized Milk Ordinance - Recommendations of the U.S. Public Health Service

(Application for copies should be addressed to the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.)

Sanitation Compliance and Enforcement Ratings of Interstate Milk Shippers.

Grade A Condensed and Dry Milk Products - A Recommended Sanitation Ordinance for Condensed and Dry Milk Products Used in Grade A Pasteurized Milk Products.

Evaluation of Milk Laboratories Recommended by the United States Public Health Service, USPH Publication No. 999-PP-3.

2

(Single copies may be obtained from the Division of Food Sanitation, Food and Drug Administration, U.S. Department of Health, Education and Welfare, Washington, DC 20204.)

## U.S. Department of Agriculture

Brucellosis Eradication - Recommended Uniform Methods and Rules, Animal and Plant Health Inspection Service, U.S. Department of Agriculture, Bulletin ARS 91-79.

Directory of Meat and Poultry Inspection Program Establishments, Circuits and Officials

(Application for copies should be addressed to the Information Division, Animal and Plant Health Inspection Marketing Service, U.S. Department of Agriculture, Washington, DC 20250.)

Regulations Governing the Grading and Inspection of Poultry and Edible Products Thereof and United States Classes, Standards, and Grades with Respect Thereto.

(Application for copies should be addressed to the Agricultural Marketing Service, U.S. Department of Agriculture, Washington, DC 20250.)

2.2 <u>Other publications</u>. The following documents form a part of this specification to the extent specified herein. Unless a specific issue is identified, the issue in effect on date of invitation for bids or request for proposal shall apply:

#### American Public Health Association

Standard Methods for the Examination of Dairy Products.

(Application for copies should be addressed to the American Public Health Association, 1015 18th Street, N.W., Washington, DC 20036.)

## Association of Official Analytical Chemists

Official Methods of Analysis of the Association of Official Analytical Chemists.

(Application for copies should be addressed to the Association of Official Analytical Chemists, Box 540, Benjamin Franklin Station, Washington, DC 20044.)

3

## National Motor Freight Traffic Association, Inc., Agent

## National Motor Freight Classification

(Application for copies should be addressed to the American Trucking Associations, Inc., Tariff Order Section, 1616 P Street, N.W., Washington, DC 20036.)

## Uniform Classification Committee, Agent

## Uniform Freight Classification

(Application for copies should be addressed to the Uniform Classification Committee, Room 1106, 222 South Riverside Plaza, Chicago, IL 60606.)

(Technical society and technical association specifications and standards are generally available for reference from libraries. They are also distributed among technical groups and using Federal agencies.)

## 3. REQUIREMENTS

## 3.1 Material.

3.1.1 <u>Milk</u>. The raw milk used in manufacturing sour cream (cultured or acidified) shall be drawn from cows in herds accredited as tuberculosis-free and certified brucellosis-free by the U.S. Department of Agriculture or herds that have passed an annual tuberculosis test and meet USDA requirements for an individually certified herd, or from cows in herds located in:

- (1) A modified Accredited Tuberculosis Area; and
- (2) Either (a) A Certified Brucellosis-Free Area; or
  - (b) Modified Certified Brucellosis Area; or
- (3) An area in the process of being certified by the USDA in accordance with USDA Agricultural Research Service Bulletin 91-79.

The milk shall be practically free from colostrum, fresh, wholesome, and normal in appearance and odor and shall be subject to inspection by the procuring agency or its duly authorized representative.

3.1.1.1 <u>Bacterial requirements</u>. Raw milk shall not exceed a standard plate count (SPC) of 100,000 per ml. prior to commingling or an SPC of 300,000 per ml. after commingling and prior to pasteurization.

3.1.1.2 <u>Source</u>. The raw milk shall be produced in localities having and enforcing milk ordinances that conform to the requirements for grade "A" raw milk for pasteurization as defined in the Grade "A" Pasteurized Milk Ordinance - 1965 Recommendations of the U.S. Public Health Service, and regulatory laboratories shall meet the requirements of the Evaluation of Milk Laboratories Recommended by the United States Public Health Service. Only such raw milk shall be used as the source of milk solids if milk solids are added or reconstituted. Dry milk and condensed milk products shall conform to the requirements of the Grade A Condensed and Dry Milk Products - A Recommended Sanitation Ordinance for Condensed and Dry Milk Products Used in Grade A Pasteurized Milk Products.

3.1.2 <u>Cream</u>. Cream shall be plant separated (as distinguished from farm separated) from milk meeting the requirements of 3.1.1. It shall be fresh, sweet and normal in appearance and odor.

3.1.3 Nonfat dry milk and condensed milk. Nonfat dry milk and condensed milk used to increase the solids content of class 2 products shall be prepared from milk conforming to the requirements of 3.1.1. The nonfat dry milk shall be packaged in commercially acceptable containers suitable to protect and preserve the contents without impairment of quality during handling, transportation and storage. The nonfat dry milk product at the approximate time of use shall be free from lumps except those which break up readily under slight finger pressure and additionally the reconstituted product (i.e. 10 percent level) when reconstituted with clean potable drinking water shall have a sweet and desirable flavor. A mildly cooked flavor shall be acceptable. The condensed milk shall be fresh, sweet and normal in appearance, flavor and odor. The standard plate count shall not exceed 30,000 per gram at the approximate time of use.

## 3.1.4 Optional ingredients.

3.1.4.1 <u>Stabilizer for class 2 product</u>. A suitable stabilizer of food grade quality may be added. The stabilizer shall have been authorized by regulations promulgated under the Food Additives Amendment, to the Federal Food, Drug and Cosmetic Act.

3.1.4.2 <u>Rennet, pepsin or other milk-clotting enzymes for class 2 product</u>. These coagulants, used singly or in recognized combinations, shall be of food grade quality and shall conform to 3.4. They may be used in the preparation of class 2 product.

3.1.4.3 <u>Starter distillate for class 2 product</u>. Starter distillate and other diacetyl containing artificial flavoring materials may be added to the cream.

' 3.1.4.4 <u>Citric acid for class 2 product</u>. Citric acid of food grade quality or its equivalent as sodium citrate may be added to the extent of not more than 0.2 percent of the weight of the cream as an aid in the production of diacetyl.

3.1.5 <u>Proprietary mixture of texture, thickening, flavor and acidifying</u> agents. These mixtures used in the preparation of type II products shall be of food grade quality and shall be in conformance with 3.4.

## 3.2 Preparation.

3.2.1 <u>Pasteurization</u>. The cream shall be pasteurized so that every particle will be heated to a temperature of not less than 150°F. and held continuously at such temperature for not less than 30 minutes or heated to a temperature of not less than 166°F. and held continuously at such temperature for not less than 15 seconds; or it shall be pasteurized by any other combination of temperature and time treatments that yield equivalent results and are approved by the local or State regulatory authorities.

3.2.2 <u>Homogenization</u>. The cream shall be homogenized at such pressure and at such temperature as will assure a smooth, uniform, viscous product. Double homogenization shall be considered as optional.

3.2.3 <u>Setting</u>. Type I product shall be inoculated with sufficient quantity of desirable active lactic acid culture to produce a product meeting the requirements of 3.3.

NOTE: To develop the characteristic flavor for type I it is recommended that the products be ripened to an acidity of between 0.68 and 0.70 percent calculated as lactic acid or a pH of 4.5.

Type II product shall have added a sufficient quantity of the material specified in 3.1.5 to produce a product meeting the requirements of 3.3.

3.2.4 <u>Cooling</u>. After preparation, the sour cream shall be cooled promptly to 45°F. or lower in accordance with recognized industry practice and shall be held at a temperature of 45°F. or lower. Do not freeze. The product shall be packaged within 24 hours after cooling.

## 3.3 Finished product.

3.3.1 <u>Physical requirements</u>. The finished product shall possess a fresh, pleasing, and desirable characteristic acid flavor and aroma and shall be free from undesirable flavors and odors. The body and texture shall be heavy, smooth, uniform, free from lumps or graininess and shall not be wheyed-off.

# 3.3.2 Bacteriological and analytical requirements.

	Type	<u>e I</u>	Тур	e II
Milkfat (not less than)	18.	.0%	18	.0%
	<u>Class 1</u>	Class 2	<u>Class 1</u>	<u>Class</u>
Milk solids-not-fat <u>1</u> / (not less than)	7.0%	9.0%	7.0%	9.0%
Phosphatase activity (less than)	Both type	of ph	than 1 mcg nenol per n coduct.	
	Туре	<u>e I</u>	Type	e II
Acidity (expressed as lactic				
acid) not more than (%)	0.7	-	0.7	
not less than (%)	0.6	5	0.0	65
or				
pH (not more than)	4.4	÷	4.4	4
(not less than)	4.2	2	4.2	2
Coliform (not more than)	10 per g	gram	10 per	gram
Yeasts and Molds (not more than)	10 per g	gram	10 per	gram

1/ Determination shall be made by calculated difference between percent total solids and percent fat content. The calculated amount of optional ingredients used for class 2 products shall be considered in this determination.

3.4 <u>Federal Food, Drug, and Cosmetic Act</u>. All deliveries shall conform in every respect to the provisions of the Federal Food, Drug, and Cosmetic Act and regulations promulgated thereunder.

3.5 <u>Delivery of product</u>. The finished products shall be delivered within 96 hours after date of packaging for type I product and within 120 hours after date of packaging for type II product.

3.6 <u>Delivery temperature</u>. The temperature of the product covered by this specification at the time of delivery shall not exceed 50°F.

3.7 <u>Plant qualification</u>. The receiving stations, processing plants, premises, equipment, personnel practices and sanitary practices used in the production and transportation of these items shall meet the applicable facilities and sanitation requirements specified in the Grade A Pasteurized Milk Ordinance -- 1965 Recommendations of the U.S. Public Health Service. Downloaded from http://www.everyspec.com

C-C-678C

## 4. QUALITY ASSURANCE PROVISIONS

4.1 <u>Responsibility for inspection</u>. The supplier is responsible for meeting all the provisions of the specification prior to submission of supplies to the Government for acceptance. Unless otherwise specified in the contract or order, the supplier is required to perform the examinations and tests prescribed herein, using his own or any other inspection facilities and services acceptable to the Government.

4.1.1 Inspection records of the examination and test shall be complete and made available to the Government as specified in the contract or order. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure that supplies conform to prescribed requirements.

4.2 <u>Sampling</u>. Samples of finished products covered by this specification and samples of any materials, components, or constituents entering into the preparation of the finished products may be taken at any time by the Government inspector to determine compliance with the requirements. Procedures for the collection and holding of samples; the selection and preparation of apparatus, media, and reagents; and the analytical procedures, incubation, reading, and reporting of results shall be in compliance with Standard Methods for the Examination of Dairy Products and the Official Methods of Analysis. Such samples, as are required, shall be at the expense of the supplier, except that samples taken at destination shall be at the expense of the Government.

4.2.1 For military agencies. Sampling for inspection shall be in accordance with MIL-STD-105 except as indicated herein.

## 4.3 Inspection.

4.3.1 <u>General</u>. Inspections shall be made by the procuring agency or a duly authorized representative at the time and place designated by the procuring agency. It may be at the site of manufacture during and after processing, or at any point in transit, or after delivery at the point of destination.

#### 4.3.2 Plant qualification conditions.

4.3.2.1 The products furnished under this document shall be unacceptable if not produced and stored in plants which currently meet the qualification conditions of 3.7.

4.3.2.1.1 Plants listed or eligible for listing in the current bulletin; Sanitation Compliance and Enforcement Ratings of Interstate Milk Shippers may be accepted as evidence of compliance.



4.3.3 <u>Factory inspection</u>. The passing as satisfactory of any detail of processing or materials shall not relieve the supplier of responsibility for faulty workmanship or materials which may be discovered at any time prior to final acceptance.

4.3.4 <u>Final inspection</u>. Unless otherwise specified (see 6.5) final inspection shall be made at time of delivery at the point of destination.

4.3.5 <u>Basis for acceptance by the Government</u>. The supplier is responsible for offering to the Government for acceptance only those items that conform to all contractual requirements (see 4.1). The Government will conduct quality conformance inspections required to determine acceptability of the components and finished product in accordance with inspection procedure set forth in 4.3.6 through 4.4.2.

4.3.6 <u>Component and material inspection</u>. In accordance with 4.1, components and material shall be inspected and tested in accordance with all requirements of referenced specifications, drawings, and standards unless otherwise excluded, amended, modified, or qualified in this specification or applicable purchase document.

4.3.6.1 <u>Milk</u>. Records of the results of the bacterial examination of the milk supply shall be available for review by the procuring agency. If upon actual examination or examination of the records it is determined that the processing plant has processed raw milk not in compliance with the requirements of 3.1.1 the finished product shall be rejected.

4.3.6.1.1 <u>Cream, nonfat dry milk and concentrated fluid milk</u>. As applicable, examination of these products shall be made to determine compliance with the requirements of 3.1.2 and 3.1.3, as concerns source, condition, age and microbiological count. Such compliance shall be ascertained by actual examination, or by examination of plant records, markings or other valid documents. Failure to comply with one or more of the above referenced requirements shall be cause for rejection of the involved lot or finished product made therefrom.

4.3.6.1.1.1 <u>Animal sources</u>. Inspection shall be made to determine that cows supplying the milk used in the preparation of this product are in herds designated by the U.S. Department of Agriculture as tuberculosis-free and from herds designated brucellosis-free or in the process of being so designated. Determination of herd status regarding tuberculosis and brucellosis shall be made by contacting the Animal and Plant Health Inspection Service. (Location of this office can be ascertained by consulting the publication entitled Directory of Meat and Poultry Inspection Program Establishments, Circuits and Officials). Nonconformance to either of the above requirements shall be cause for rejection of the lot.

9

4.3.6.2 <u>Milk products</u>. In the event milk products are obtained from sources other than the plant where the end product is manufactured, representative samples of the milk products used in the manufacture of the end product shall be tested for conformance to the bacterial requirement of 3.1.1.1. The standard plate count shall be conducted in accordance with the procedure outlined in the latest edition of Standard Methods for the Examination of Diary Products; Chapter 4, Agar Plate Method. Nonconformance to the above referenced requirements shall be cause for rejection of the lot.

4.3.6.2.1 Sources other than the plant where the milk product is manufactured must be approved sources (see 4.3.2.1). Evidence of compliance of these places may be verified from listings in the bulleting listed in 4.3.2.1.1. Evidence that milk products are obtained from non-approved sources shall be cause for rejection of the finished product made therefrom.

4.3.6.3 <u>Non-milk ingredients</u>. Acceptance of these ingredients for compliance with the applicable requirements of 3.1.4 through 3.1.5 shall be based on the examination of the applicable labels, invoices and similar documents. This examination shall be made on each new lot of the component received and not less than once during each contract. A statement of compliance shall be provided by the supplier that the non-milk ingredients used conform to the applicable requirements of 3.1.4 and 3.1.5. Noncompliance with one or more identity requirements shall indicate an unacceptable ingredient and use of such shall be cause for rejection of the involved quantity of finished product.

#### 4.3.7 In-process examination.

4.3.7.1 Equipment, procedures and controls. Records shall be maintained for specific procedures of time and temperature controls covering product included in the purchase contract. Noncompliance with the requirements of 3.2, as determined by actual examination or examination of records, shall be cause for rejection of the involved finished product.

4.3.7.2 Formulation. Formulation records shall be maintained. Noncompliance with type requirements of the finished product as determined by actual examination or examination of records, shall be cause for rejection of the involved quantity of finished product.

4

## 4.3.8 Finished product inspection.

4.3.8.1 Lot size (civil agencies). An inspection lot for examination or testing shall be one type and class. The size shall be expressed in terms of primary containers. More than one production code, that is, product produced in one day, may be included in the lot if the number of cases from each code represented in the lot is known and the production dates are all within 3 days. (See 6.3 for verification examination.)

4.3.8.2 Examination of end item for the net weight, packaging and product characteristics shall be in accordance with the following procedures. The appropriate minimum sample size designated in table IA as applicable shall be formed by drawing one sample unit per shipping case selected proportionately from the production codes represented in the inspection lot. The applicable acceptance (AC) and rejection (RE) numbers are given in table IA. Classification of defects found during the examination shall be in accordance with tables II and IV. Examination for condition of containers for civil agencies shall be in accordance with the U.S. Standard for Condition of Food Containers.

4.3.8.2.1 <u>Military agencies</u>. Classification of defects found during examination shall be in accordance with tables II, III, and IV, 4.3.8.3.1 and 4.3.8.4. The examination criteria for the above tables shall be as shown in table IB. The acceptable quality levels (AQL's) shall be expressed as percent defective for table II and in terms of defects per hundred units for tables III and IV.

Number of primary containers in the inspection lots	Minimu Sample Size		ijor		+ Minor) tal	
		Ac	Re	Ac	Re	
2-50	2	0	1	0	1	
51-500	8	0	1	1	2	
501 and over	13	0	1	2	3	

TABLE IA. Plans for end item examination (for civil agencies)

TABLE IB. Plans for end item examination (for military agencies)

•	Inspection	Sample	Lot size	AQLs	
Table	level	unit	expressed in	Major	Minor
11	S-3	l filled and sealed container	Primary containers		2.5
111	I	l filled and sealed container	Primary containers	2.5	10.0
IV	S-2	Contents of 1 container	Primary containers	1.5	6.5

Category Defect Minor Weight of contents more than five percent under specified 201 weight (applicable to containers of one pound or less). (Report results to nearest 1/8 ounce). 202 Weight of contents more than two percent under specified weight (applicable to containers of over one pound). (Report results to nearest 1/4 ounce). 1/ Lot shall be rejected if sample data indicate lot average net weight is less than specified net weight. TABLE III. Examination of primary container Category Defect Major Minor 101 Open seam or seal; or tear or hole through container. 102 Improperly closed or cover missing, exposing product to contamination. 103 Inner liner or bag, when applicable, broken, torn, missing or otherwise exposing product. 104 Interior of container, liner or bag uncleam, as applicable. 105 Nomenclature missing, incorrect or illegible. 106 Exterior unclean (non-rigid containers). 201 Objectionable odor. 202 Exterior unclean (rigid containers). 203 Labeling information other than nomenclature missing, incorrect or illegible.

TABLE II. Examination for net weight 1/

Category		Defect
Major	Minor	Flavor
101		Flat
102		Rancid
103		Bitter
104		Coarse
105		Not a fresh, pleasing and desirable character- istic acid flavor and aroma
	201	Green
	202	Metallic or oxidized
		Body and texture
106		Whey separation, definite
107		Weak
	203	Whey separation, slight
	204	Grainy
	205	Lumpy

## TABLE IV. Examination of product characteristics 1/

1/ Presence of foreign materials shall be basis for rejection of the lot.

4.3.8.3 Examination for age and internal temperature product at time of shipment (civil agencies). The product shall be examined to determine compliance with 3.5 and 3.6. Noncompliance with above requirement as indicated by marked date of pack, or examination of code or records shall be cause for rejection of the lot.

4.3.8.3.1 For military agencies. Examination shall be made at time of delivery to determine conformance with the requirements in 3.5 and 3.6. This determination shall be ascertained by examination of marked date of packaging or examination of code date or records pertaining thereto. Nonconformance to the above referenced requirements shall be cause for rejection of the lot.

4.3.8.4 Examination of marking (military only). Shipping containers shall be examined to determine compliance with the marking requirements in 5.3.2. The sample unit shall be one (1) marked shipping container and the sample size shall be the number of shipping containers indicated by inspection level S-4. Lot size shall be expressed in terms of the sample unit. The AQL, expressed as percent defective, shall be 1.5. A defect shall be: Majormarking missing, incomplete or illegible.

4.3.9 <u>Sampling procedure and acceptance criteria for testing of finished</u> <u>product (civil agencies)</u>. The finished product shall be tested for milkfat, milk solids-not-fat, phosphatase activity, pH and acidity, coliform, and yeast and molds in accordance with the requirements of 3.3.2. Procedures for testing shall be in accordance with 4.4. The sample size for testing shall be the contents of the primary container for packages weighing one pound net weight or less, of each inspection lot selected for testing. In the case of packages over one pound net weight a 1/2-pound sample shall be withdrawn aseptically, making certain that both surface and subsurface contents are included in the sample. Nonconformance to one or more test requirements of each lot shall be cause for administrative action.

4.3.9.1 For military agencies, sampling procedure and acceptance criteria for testing of finished product. The finished product shall be tested for milkfat, milk solids-not-fat, pH and acidity, phosphatase and for microbiological counts as specified in 3.3.2. Procedures for testing shall be in accordance with 4.4.1 and 4.4.2, as applicable. The sample for testing shall be a 1-pound composite derived from the number of primary containers indicated by inspection level S-2, for fat, milk solids-not-fat, pH or acidity and phosphatase determinations. Lot size shall be expressed in terms of primary containers. For microbiological determinations, test requirements shall be on a unit basis and the sample size shall be the number of primary containers indicated by inspection level S-1. When the filled and sealed primary container is in excess of 2 pound capacity, an 8 ounce sample shall be extracted, aseptically, from each of the sample units and placed into a sterile container. The composite sample for lot average requirements may be drawn, in part, from the unit samples used for microbiological requirements. Samples shall be composited in the laboratory. Results shall be reported as follows: Milkfat to the nearest 0.1 percent, pH to the nearest 0.1 unit; phosphatase, pass or fail and microbiological results in accordance with Standard Methods for the Examination of Dairy Products. Nonconformance to one or more test results requirements shall be cause for referral to the responsible authority for administrative action.

4.4 <u>Test methods</u>. Examination and test procedures which differ from those specified herein, unless otherwise excepted, may be used by the supplier if they provide a quality assurance equivalent to that specified. If the Government contracting officer determines that such procedures and controls do not

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provide, as a minimum such quality assurance, the supplier will use the procedures set forth herein. In case of dispute as to examination or test results, the procedures specified herein will govern.

4.4.1 <u>Chemical analyses</u>. Chemical analyses, shall be made in accordance with the following methods from Official Methods of Analysis of the Association of Official Analytical Chemists in effect on the date of invitation for bids, or in accordance with methods that give the equivalent results.

Test	Chapter and Section	Method
Milkfat	Chapter: Dairy products Section: Cream	Fat
Milk solids-not-fat	Chapter: Dairy products Section: Cream	Total solids (see footnote <u>1</u> / to 3.3.2)
Acidity	Chapter: Dairy products Section: Cream	Lactic acid
Hydrogen-Ion concentration (pH)	Chapter: Beverages Section: Beer	Electrometric Method

4.4.1.1 <u>Phosphatase activity</u>. Phosphatase activity shall be determined in accordance with the Scharer Rapid Method of the Standard Methods for the Examination of Dairy Products.

4.4.2 <u>Microbiological analyses</u>. Microbiological requirements shall be determined in accordance with the following methods described in Standard Methods for the Examination of Dairy Products:

Test	Chapter	Method
Coliform estimate	Microbiological Methods for Cheese and other Cultured Products	Test for Coliform Group
Yeast and Mold	Same	Yeast and Mold

#### 5. PREPARATION FOR DELIVERY

5.1 <u>Packaging, level C</u>. Commercial packaging of size specified (see 6.2) is acceptable. All containers shall be sound and clean and shall afford adequate and proper protection of the contents from contamination. All containers shall be filled and closed by sanitary means under best commercial practices.

5.1.1 The following tolerances from net weights will be allowed in any one container provided the average net weight of the containers inspected in accordance with table II is not less than the net weight specified: minus 5 percent (applicable to containers of one pound or less) or minus 2 percent (applicable to containers of more than one pound).

5.2 <u>Packing, level C</u>. The product shall be packed in shipping containers in accordance with Uniform Freight Classification Rules or National Motor Freight Classification Rules as applicable.

5.3 Labeling and marking.

5.3.1 Civil agencies.

5.3.1.1 <u>Individual containers</u>. Commercial or additional labeling as specified in the Pasteurized Milk Ordinance will be acceptable (see 5.3.1.2).

5.3.1.2 <u>Shipping containers</u>. Shipping containers shall be marked in accordance with FED-STD-123, applicable to local, State or Federal milk ordinances or regulations, and such other pertinent information as specified by individual agencies. In addition the following information shall be marked on the top of the shipping container:

KEEP REFRIGERATED (34 TO 40°F) DO NOT FREEZE

## 5.3.2 Military agencies.

5.3.2.1 <u>Individual containers</u>. Commercial labeling and marking complying with the local, State or Federal milk ordinances or regulations will be acceptable.

5.3.2.2 <u>Shipping containers</u>. Shipping containers shall be marked in accordance with MIL-STD-129. In addition the following information shall be marked on the top of the shipping container:

KEEP REFRIGERATED (34 TO 40°F) DO NOT FREEZE

#### 6. NOTES

6.1 Intended use and technical information. The products covered by this specification are intended as items of limited shelf life. Even though the products are already sour when delivered, they should nevertheless be considered as perishable and must be given refrigeration protection equal to that given to other fresh perishable dairy products. The shelf life at

40°F. to 45°F. is approximately 4 weeks from time of production. The product gives increased flavor to soups, meat roasts, baked fowl and seafoods. It may also be used as a dressing for hot and cold vegetables particularly freshly baked hot potatoes. It is also relished by many as a spread for bread and crackers and as a base for assorted flavored dips.

6.2 Ordering data. Purchasers should select the preferred options permitted herein and include the following in procurement documents:

- (a) Title, number, and date of this specification.
- (b) Type and class of product required (see 1.2).
- (c) When specific optional ingredients are required for class 2 products (see 3.1.4 through 3.1.4.4).
- (d) Type and capacity (net weight) of container required (see 5.1).
- (e) When vertification inspection is not required (see 6.3).

6.3 Verification examination for civil agencies. Unless otherwise specified (see 6.2), the procuring agency or duly authorized representative, will select verification samples according to table IA to check compliance with applicable finished product requirements in tables II, III, and IV at not less than the following rate:

## Initial or retest period

# If supplier has not had a contract in previous 90 days; or if the last

One sample from each inspection lot (see 4.3.8.1) until three consecutive lots are satisfactory and then sample at routine rate.

Sampling rate

#### Routine examination period

samples tested from a supplier were

unsatisfactory.

After three consecutive satisfactory inspection lots.

At least twice a month from an inspection lot. 1/

1/ Samples may be drawn from each inspection lot, but it is the intent of this specification to test a representative lot from a satisfactory supplier and to consider that other inspection lots have been comparably produced.

6.4 Award of contracts for the products specified in this document will be limited to plants known to maintain the required sanitation conditions of 3.7 (see also 4.3.2).

6.5 Destination inspection (civil agencies). When the finished product has been inspected and passed at point other than destination, the contract should require that the product be inspected at destination for condition and quantity only. Unless otherwise specified, such inspection shall be made by the receiving facility.

## Custodians:

Army - GL Navy - SA Air Force - 45

## Review activities:

Army - MD Navy - MC, MS DP-SS

## Preparing activity:

## Army - GL

CIVIL AGENCY COORDINATING ACTIVITIES:

USDA - AMS GSA - FSS HEW - FDA, NIH VA - DMS

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