

N-C-541F

January 16, 1975

SUPERSEDING

Fed. Spec. N-C-541E

January 27, 1969 and

MIL-S-35083B

8 August 1966

## FEDERAL SPECIFICATION

### STARCHES, EDIBLE

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 Scope. This specification covers edible corn starch, pregelatinized starch and modified starch for use by agencies of the Federal government.

1.2 Classification. The starches covered by this specification shall be of the following types, as specified (see 6.1):

- Type I - Cornstarch
- Type II - Pregelatinized starch
- Type III - Modified starch

#### 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 this specification to the extent specified herein:

##### Federal Specifications:

- TT-C-495 - Coatings, Exterior, for Tinned Food Cans
- UU-S-48 - Sacks, Shipping, Paper
- PPP-B-636 - Boxes, Shipping, Fiberboard
- PPP-C-29 - Canned Subsistence Items, Packaging and Packing of
- PPP-C-96 - Cans, Metal, 28 Gage and Lighter

(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.

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(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 Specifications:**

- MIL-L-1497 - Labeling of Metal Cans for Subsistence Items
- MIL-L-10547 - Liners, Case and Sheet, Overwrap, Water-Vaporproof or Waterproof, Flexible
- MIL-L-35078 - Loads, Unit: Preparation of Nonperishable Subsistence
- MIL-T-21330 - Treatment, Insect-Resistant for Paper

#### **Military Standards:**

- MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes
- MIL-STD-129 - Marking for Shipment and Storage
- MIL-STD-668 - Sanitary Standards for Food Plants

(Copies of Military Specifications and Standards required by suppliers in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer.)

#### **LAWS AND REGULATIONS**

##### **U.S. Department of Agriculture**

##### **United States Standards for Condition of Food Containers**

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

##### **Department of Health, Education and Welfare**

##### **Federal Food, Drug and Cosmetic Act and Regulations Promulgated Thereunder**

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

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**2.2 Other publications.** 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:

**Association of Official Analytical Chemists**

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

(Copies may be obtained from the Association of Official Analytical Chemists, Post Office Box 540, Benjamin Franklin Station, Washington, DC 20044.)

**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.)

**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.)

(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 Materials.** All materials shall be clean, sound, wholesome and free from evidence of insect infestation or other objectionable foreign matter, flavors or odors.

**3.2 Finished product.**

**3.2.1 Type I, cornstarch.** Type I, cornstarch shall be pure, unmodified, pulverized cornstarch, prepared from clean sound corn (maize).

**3.2.2 Type II, starch, pregelatinized.** Type II, starch shall be pregelatinized, modified type which resists breakdown under heat and acid conditions, it shall be of high quality and have a bland taste. The base starch used in preparing the pregelatinized starch shall be of the non-retrograding, non-gelling type. Fruit fillings and sauce prepared using this starch shall have a good clarity, a smooth stable texture without lumps or gel formation. It shall show no excessive tendency for "boil out".

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**3.2.3 Type III, starch, modified.** The type III, modified, starch shall be uncooked modified type, requiring cooking to gelatinize. It shall be of high quality and have a bland taste. The viscosity characteristics shall be such, that it is little affected by variation in pH and resists breakdown under low pH conditions and maintains excellent stability during extreme refrigeration and frozen storage. Fruit fillings and sauce prepared with this starch shall have good clarity, smooth stable texture and full bodied.

**3.2.4 Chemical and physical requirements.** The starches shall conform to the following requirements, as shown in table I. In addition, the physical requirements of the starch shall be a uniform free flowing, white to off white, finely pulverized powder, free from lumps and hard or gritty particles.

TABLE I. Chemical or physical requirements

Type	Ash 1/ Percent	Maximum limits of		Particle size requirements
		Protein (NX-6.25 1/) Percent	Moisture Percent	
I	0.15	0.50	13.0	Not less than 98.0 percent shall pass through a U.S. Standard No. 140 mesh screen
II	0.80	0.50	8.0	Not less than 95.0 percent shall pass through a U.S. Standard No. 80 mesh screen
III	0.80	0.50	13.0	Not less than 98.0 percent shall pass through a U.S. Standard No. 100 mesh screen

1/ These limiting values are on a moisture free basis.

**3.2.5 Flavor and odor.** The starches when prepared into paste with water shall have a natural starch flavor and odor, (essentially flavorless and odorless) and shall be free of rancid, musty, sour and other undesirable flavors and odors.

**3.2.6 Viscosity.** The viscosity, when tested as specified (see 4.5.3 and 4.5.3.2) or the equivalent of these values, when a different means of measurement is used, shall conform to the requirements of table II.

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TABLE II. Viscosity measurements

Type	Minimum and maximum limits of	
	Bostwick reading	Brookfield reading
I	-	-
II	Not more than 7.5 centimeters	200-350 (20,000 - 35,000 centipoises)
III	Not more than 6.5 centimeters	200-300 (20,000 - 30,000 centipoises)

3.3 Federal Food, Drug and Cosmetic Act. All deliveries shall conform in every respect to the provisions of the Federal Food, Drug and Cosmetic Act and regulations promulgated thereunder.

3.4 Workmanship. The product shall be prepared in accordance with part 128 of the Code of Federal Regulations, Title 21, Human Foods; Current Good Manufacturing, processing, packing or holding. In addition, for Military agencies, the product shall be processed in establishments meeting the requirements of MIL-STD-668.

#### 4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the supplier is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified in the contract or order, the supplier may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure supplies and services conform to prescribed requirements.

#### 4.2 Preacceptance inspection (plant sanitation inspection).

4.2.1 For civil agencies. When specified (see 6.1), inspection of plants producing the product will be conducted upon the request of the contracting officer to the appropriate Government inspection agency. Awards of contracts will be limited to establishments known to maintain proper sanitary conditions or which have received prior sanitary approval recommended by the inspection agency.

4.2.2 For military agencies. The product shall be rejected if produced in plants not meeting the requirements of 3.4.

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#### 4.3 Acceptance inspection.

4.3.1 Condition inspection of containers. When inspection of product for quality and condition is performed by the U.S. Department of Agriculture, the United States Standards for Condition of Food Containers shall apply. For applicable criteria governing inspection of containers for the Military agencies, (see 4.3.4.2).

4.3.2 Sampling for inspection. Sampling for inspection shall be in accordance with MIL-STD-105, except as otherwise stated herein.

4.3.3 Component and material inspection. In accordance with 4.1, components and materials shall be inspected in accordance with all the requirements of referenced specifications, drawings and standards unless otherwise excluded, amended, modified or qualified in this specification or applicable purchase document.

4.3.3.1 Testing of cans. The sample unit for testing tinplate shall be 1 can with lid. The sample size shall be the number of cans indicated by level S-1. Test requirements (see 5.1.1.2) shall be an average requirement. Lot size shall be expressed in terms of cans. Test procedures shall be in accordance with 4.5.4. Test results shall be reported to the nearest 0.01 lb. (4.5 g) tinplate/base box. In addition, exterior can coating when required and can label shall be tested in accordance with the applicable subsidiary specification except that the tests shall be performed on the same samples submitted for the tinplate test. Nonconformance shall indicate unacceptable cans and use of such shall be cause for rejection of the involved end item.

4.3.4 Examination of end item. End item examination shall be in accordance with tables IV and V, and 4.3.4.1 through 4.3.4.6. Sampling plans for the aforementioned tables shall be in accordance with table III. The acceptable quality levels (AQLs) shall be expressed as percent defective for table IV and defects per hundred units for table V.

TABLE III. Sampling plans 1/

Table	Sample unit	Lot size expressed in	Inspection level	AQLs	
				Major	Minor
IV	1-filled carton, can or bulk packed sack	Cartons, cans or sacks	S-3	-	2.5
V	1-pound of product from a carton, can or bulk packed sack	Cartons, cans or sacks	S-2	1.0	-

1/ Each type product shall be examined as a separate lot.

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TABLE IV. Examination for net weight 1/

Category	Defect
<u>Minor</u>	
201	Less than 15 and 3/4 ounces, (447 g) (for 1-pound carton)
202	Less than 3-pounds, 5/8 ounces, (1.38 kg) (for 4-pound can)
203	Less than 49 pounds, 8-ounces, (22.4 kg) (for bulk packed sack)

1/ Lot shall be rejected if sample data indicate lot average net weight is less than specified net weight.

TABLE V. Examination of product

Category	Defect
<u>Major</u>	
101	Not white
102	Not finely pulverized
103	Not free flowing
104	Not free from lumps or hard gritty
	Prepared <u>1/</u>
105	Not basically bland and odorless, typical of starch
106	Not free of rancid, musty, sour or other undesirable flavors or odors

1/ Prepare a sample of prepared product from each sample unit by adding a small amount of water to approximately 2-ounces (57 g) of product.

4.3.4.1 Examination of particle size. The product shall be examined to determine conformance to particle size requirements of table I. Procedures shall be in accordance with 4.5. The sample for testing shall be a 100 gram composite of product derived from the number of cartons, cans or bulk packed



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sacks indicated by inspection level S-2. Lot size shall be expressed in terms of the primary container. Results shall be reported to the nearest whole percent. Nonconformance shall be cause for rejection of the lot.

4.3.4.2 Examination of cans and cartons. Examination of cans and cartons for condition and labeling shall be in accordance with the United States Standards for Condition of Food Containers. In addition, the can shall be examined for seam leakage in accordance with the applicable quality assurance provisions of PPP-C-29.

4.3.4.3 Examination of waterproof case liners. The filled and closed waterproof case liners shall be examined in accordance with the criteria in the appendix of MIL-L-10547.

4.3.4.4 Examination of shipping sacks. Examination of the filled and closed sacks shall be in accordance with the applicable quality assurance provisions in the appendix of UU-S-48. In addition, the following defects shall be included: required contractual markings missing, incorrect or illegible; tear, hole, open seam or broken stitches. The sacks shall not be acceptable if IRT date markings indicate the sacks will be more than 60 days old at the time the product is to be shipped. For level C sacks, only the aforementioned defects pertinent to markings and "tear, holes, open seams or broken seams", shall apply.

4.3.4.5 Examination of fiberboard shipping containers. The filled and closed containers shall be examined in accordance with the examination criteria in the appendix of PPP-B-636. In addition, the following defect shall be included in the examination, Major: Markings missing, incorrect or illegible; Minor: Number of contents not as specified; Minor: Intermediate fiberboard containers when required not fabricated and closed as specified.

4.3.4.6 Examination of unit loads. Unit loads shall be examined in accordance with MIL-L-35078.

4.4 Testing of finished product. The finished product shall be tested for moisture, protein, ash and viscosity, in accordance with procedures in 4.5. The sample for testing shall be a one-pound composite of product derived from the number of primary containers indicated by inspection level S-2. Lot size shall be expressed in terms of the primary container. Results shall be reported to the same unit or decimal place as specified for the pertinent requirement. A test failure shall be cause for rejection of the lot.

4.5 Examination and test methods. 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 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.



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#### 4.5.1 Examination procedures.

4.5.1.1 Particle size examination. The particle size examination shall be performed as follows: Place a 100 gram composite sample on the specified sieve (see table I) with pan attached. Set on a flat, smooth, horizontal surface using a soft 3-inch hair brush, with handle pointed toward the operator, at an angle of 45°, stroke the sample along the perimeter of the sieve by drawing the brush towards the operator in 5 to 7 inch strokes. The full width of the brush shall bear firmly upon the mesh and follow the curvature of the perimeter. Rotate the sieve about 1/6 turn after each stroke, in the direction opposite the motion of the brush. Brush at the rate of 1 stroke per second for 5 minutes or until the end point has been reached. Report the percent of material passing through the sieve.

#### 4.5.2 Test procedures.

4.5.2.1 Chemical analyses. Chemical analyses shall be made in accordance with the following methods, from the Official Methods of Analysis of the Association of Official Analytical Chemists as follows:

<u>Test</u>	<u>Source</u>	<u>Method</u>
Moisture	Chapter: Cereal Foods Section: Wheat flour	Total solids (moisture indirect method) vacuum oven
Protein (NX 6.25)	Chapter: Cereal Foods Section: Wheat flour	Total protein
Ash	Chapter: Cereal Foods Section: Wheat flour	Ash (direct method)

4.5.3 Viscosity test, (type II). Viscosity test procedures for a simulated pie filling using type II pregelatinized starch shall be as follows:

(a) Weigh 170 grams of sugar and 27 grams of starch into an electrically operated mixing bowl, (2-speed mixer), mix until sugar and starch are well blended.

(b) Add 100 ml. of distilled water (77°F) (25°C) and mix for 30 seconds with speed No. 2.

(c) Add 200 ml. of distilled water (77°F) (25°C) with sufficient citric acid solution (10 percent) and mix 3 minutes using No. 2 speed. Scrape bowl, using rubber spatula if necessary. The pH of resultant paste shall be  $3.5 \pm 0.1$ . This level of pH is attained by using procedures specified in 4.5.3.1.

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(d) Transfer the paste to a 600 ml. pyrex beaker, cover with aluminum foil and place in oven at 425°F (218°C) for 20 minutes.

(e) Remove from oven and measure the distance of flow (in centimeters) in 30 seconds, in a Bostwick Consistometer at 160°F (71°C)  $\pm$  5°F ( $\pm$  3°C), and allow to cool to room temperature.

(f) After standing at room temperature for not less than 18-24 hours, read the viscosity on a Brookfield Model RVF (or equal) viscometer, using No. 6 spindle at 20 rpm. The viscosity reading shall be corrected to a Brookfield silicone reading prior to reporting the results.

4.5.3.1 Method of pH adjustment. The pH of starch-sugar paste shall be adjusted using the following procedures:

(a) Weigh 17 grams sugar and 2.7 grams of sample starch into 150 ml. beaker.

(b) Add 10 ml. of H<sub>2</sub>O and mix with stirring rod to make a paste, add additional 20 ml. H<sub>2</sub>O and mix.

(c) Using pH meter, add 10 percent citric acid from 1 ml. graduated pipette with stirring. The citric acid required to reduce pH to 3.5  $\pm$  0.1 equals ml. of 10 percent citric acid required X 10.

4.5.3.2 Viscosity test (type III, modified starch). Viscosity test procedures for the simulated pie filling, using type III modified starch shall be prepared as follows:

(a) Weigh 22.5 grams of starch into a 400 ml. beaker, mix, add 300 ml. of distilled water 77°F (25°C), mix to make a slurry (a thermometer may be used as a stirring rod).

(b) Place beaker in steam bath and heat while mixing to 190°F (88°C), hold that temperature for 5 minutes.

(c) Mix starch slurry, remove from steam bath, stir in 45 grams of sugar until dissolved.

(d) Measure the distance of flow (in centimeters) in 30 seconds, in a Bostwick Consistometer at 185°F (85°C)  $\pm$  3°F, ( $\pm$  2°C).

(e) Cover with aluminum foil and let stand at room temperature for not less than 18-24 hours and check the viscosity on the Brookfield Model RVF (or equivalent), viscosimeter using a No. 6 spindle at 20 rpm. The viscosity reading shall be corrected to a brookfield silicone reading prior to reporting the results.

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4.5.4 Tin coating weights. The coating weights shall be determined by any method specified in PPP-C-96.

## 5. PREPARATION FOR DELIVERY

5.1 Packaging. Packaging shall be level A or C as specified (see 6.1). The net weight and allowable individual unit variations in tolerances shall be as listed below:

<u>Container</u>	<u>Net weight</u>	<u>Allowable unit variations</u> 1/
Carton	1-lb. (0.45 kg)	1/4-ounce (7.0 g)
Cans	4-lbs. (1.8 kg)	3/8-ounce (11 g)
Multiwall paper shipping sack	50 lbs. (23 kg)	8-ounces (226 g)

1/ A minimum tolerance as shown above will be allowed in any one container provided the average net weight of the container inspected in accordance with table IV is not less than the net weight specified above.

### 5.1.1 Level A.

5.1.1.1 Cartons, type I product. One pound (0.45 kg) of product shall be packaged in a commercial carton normally used for the product.

5.1.1.1.1 Intermediate container. Twenty-four or forty-eight one pound (0.45 kg) cartons of type I product shall be packed in a non-test, style RSC, corrugated container with a taped manufacturer's joint. Closure shall be by gluing or taping. The intermediate container shall be inclosed in a waterproof case liner fabricated and closed in accordance with MIL-L-10547 for subsistence items.

5.1.1.2 Cans, type II product. Four pounds (1.8 kg) of type II product shall be packaged in a size 603 by 700, round, metal can with soldered side seam and compound-lined, double-seamed ends. The can shall be made throughout from not less than commercial 0.25-pound electrolytic tin plate per base box (see 4.5.4) and shall be coated on the outside with a coating conforming to type I of TT-C-495. The filled and sealed can shall not leak when tested in accordance with PPP-C-29.

### 5.1.2 Level C.

5.1.2.1 Type I product. One pound (0.45 kg) of the type I product shall be packaged in a commercial carton normally used for the product.

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5.1.2.2 Type II product. Type II product shall be packaged in accordance with 5.1.1.2, except that cans with or without commercial exterior coating are acceptable.

5.2 Packing. Type I product, packaged in an intermediate container as specified in 5.1.1.1.1, shall be packed in a fiberboard box in accordance with level A, or B as specified (see 6.1). Twenty-four (11 kg) or forty-eight (22 kg) pounds of type I product, packaged as specified in 5.1.2.1, shall be packed in a fiberboard box in accordance with level C. Six size 603 by 700 cans of type II product shall be packed in a fiberboard box in accordance with level A, B, or C, as specified (see 6.1). Fifty pounds (23 kg) of type II product shall be packed in a multiwall paper shipping sack in accordance with level C. Fifty pounds (23 kg) of type III product shall be packed in a multiwall paper shipping sac in accordance with level A, B, or C, as specified (see 6.1).

5.2.1 Level A.

5.2.1.1 Fiberboard box. The shipping container shall be a snug-fitting fiberboard constructed, closed, and reinforced in accordance with style RSC, V2s of PPP-B-636.

5.2.1.2 Multiwall paper shipping sack. The shipping container shall be a multiwall paper shipping sack fabricated and closed in accordance with type I, style B, or type II, style A, construction 9 or 9X, MB2 of UU-S-48. The outer surface of the sack shall be insect-resistant treated in accordance with MIL-T-21330.

5.2.2 Level B.

5.2.2.1 Fiberboard box. The shipping container shall be a snug-fitting fiberboard box constructed, closed, and reinforced in accordance with style RSC, V3c, V3s, or V4s of PPP-B-636.

5.2.2.1.1 When specified (see 6.1 and 6.3), the shipping container specified in 5.2.2.1 shall be reinforced with nonmetallic strapping or pressure-sensitive adhesive, filament reinforced tape in accordance with the appendix of PPP-B-636, except that one lengthwise and one girthwise band may be used.

5.2.2.2 Multiwall paper shipping sack. The shipping container shall be a multiwall paper shipping sack fabricated and closed in accordance with type I, style B, or type II, style A, construction 4 or 4X, MB1, of UU-S-48. The outer surface of the sack shall be insect-resistant treated in accordance with MIL-T-21330.

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### 5.2.3 Level C.

5.2.3.1 Fiberboard box. The shipping container shall be a snug-fitting fiberboard box constructed and closed in accordance with style RSC, type CF or SF, class domestic, method II closure, of PPP-B-636.

5.2.3.1.1 When specified (see 6.1 and 6.4), 24 (11 kg) or 48 (22 kg) pounds of type I product, six cans of type II product, or 50 pounds (23 kg) of type II or type III product in bulk shall be packed in accordance with Uniform Freight Classification Rules or National Motor Freight Classification Rules, as applicable.

5.3 Unit loads. When specified (see 6.1), the product, packed as specified in 5.2, shall be arranged in unit loads in accordance with MIL-L-35078 for the type and class of load specified.

### 5.4 Labeling and marking.

5.4.1 Cartons. Cartons shall be labeled in accordance with the Federal Food, Drug and Cosmetic Act and regulations promulgated thereunder.

5.4.2 Cans. Cans shall be labeled in accordance with MIL-L-1497.

5.4.3 Shipping container. Shipping containers shall be marked in accordance with MIL-STD-129 and, when applicable, UU-S-48.

5.4.4 Unit loads. Unit loads shall be marked in accordance with MIL-L-35078.

## 6. NOTES

6.1 Ordering data. Purchasers should exercise any desired options offered herein and procurement documents should specify the following:

- (a) Title, number and date of this specification.
- (b) Type of starch required (see 1.2).
- (c) When plant sanitation inspection required by civil agencies (see 4.2.1).
- (d) Type of packaging required (see 5.1).
- (e) Levels of packaging and packing required (see 5.1 and 5.2).
- (f) Type and class of unit load when unit loading is specified (see 5.3).

6.2 Intended use. The following information as to intended use of and type required should be considered before ordering:

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	<u>USE</u>	<u>PREPARATION</u>	<u>APPLICATION</u>
Type I	Sauces, gravy and thickener in pie filling	Cooking required	Normally used in mess halls or galley, where freeze-thaw stability is not required
Type II	Sauces, gravy and thickener in pie filling	Cooking not required	Normally used in mess halls or galley where freeze-thaw stability is not required, however, use in situation where cooking time is short
Type III	Sauces, gravy and thickener in pie filling	Partial cooking required (180°-190°F)	Use in central food preparation where freeze-thaw stability is required

6.3 Based on conditions known or expected to be encountered during shipment, handling and storage of the specific item being procured, the contracting officer should select the appropriate level of pack in accordance with the criteria established in AR 700-15/NAVSUPINST 4030.28/AFR 71-6/MCO 4030.14.D/DSAR 4145.7, as applicable.

6.4 Packing specified in 5.2.2.1.1 is intended for transfer at sea operations or specific overseas operations.

6.5 Packing specified in 5.2.3.1.1 is intended for direct shipment from the supply source to the first consuming activity for immediate use within CONUS.

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**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:**

GSA - FSS  
VA - DMS  
AGR - AMS  
HEW - FDA

**Project No. 8920-0325**

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**DOCUMENT IDENTIFIER AND TITLE****N-S-541F - STARCHES, EDIBLE****NAME OF ORGANIZATION AND ADDRESS****CONTRACT NUMBER****MATERIAL PROCURED UNDER A**☐ DIRECT GOVERNMENT CONTRACT ☐ SUBCONTRACT**1. HAS ANY PART OF THE DOCUMENT CREATED PROBLEMS OR REQUIRED INTERPRETATION IN PROCUREMENT USE?****A. GIVE PARAGRAPH NUMBER AND WORDING.****B. RECOMMENDATIONS FOR CORRECTING THE DEFICIENCIES****2. COMMENTS ON ANY DOCUMENT REQUIREMENT CONSIDERED TOO RIGID****3. IS THE DOCUMENT RESTRICTIVE?**☐ YES ☐ NO (If "Yes", in what way?)**4. REMARKS****SUBMITTED BY (Printed or typed name and address - Optional)****TELEPHONE NO.****DATE****DD FORM 1426**  
1 JAN 72

REPLACES EDITION OF 1 JAN 66 WHICH MAY BE USED