

**USDA COMMODITY REQUIREMENTS**

**SFSG11  
SOY-FORTIFIED SORGHUM GRITS  
FOR USE IN EXPORT PROGRAMS**

Effective Date: 09/01/05

**USDA COMMODITY REQUIREMENTS**  
**SFSG11**  
**SOY-FORTIFIED SORGHUM GRITS**  
**FOR USE IN EXPORT PROGRAMS**

**Table of Contents**

<b><i>Part 1</i></b>	<b><i>COMMODITY SPECIFICATIONS</i></b>	<b><i>1</i></b>
Section 1.1	COMMODITIES	1
Section 1.2	PRODUCT ENRICHMENT REQUIREMENTS	2
Section 1.3	PROPORTIONS	3
Section 1.4	INGREDIENT SPECIFICATIONS	3
Section 1.5	QUALITY ASSURANCE	5
Section 1.6	QUALITY DISCOUNTS	6
<b><i>Part 2</i></b>	<b><i>CONTAINER AND PACKAGING REQUIREMENTS</i></b>	<b><i>6</i></b>
Section 2.1	GENERAL	6
Section 2.2	CONTAINERS AND MATERIALS	6
Section 2.3	25-KILOGRAM MULTIWALL PAPER BAGS	7
Section 2.4	25-KILOGRAM HIGH PERFORMANCE PACKAGING CONSTRUCTIONS	8
Section 2.5	OUTER CLOSURE AND SEALS	9
Section 2.6	PERFORMANCE TEST PROCEDURES	9
Section 2.7	SEAL PEEL TEST	10
<b><i>PART 3</i></b>	<b><i>MARKING REQUIREMENTS</i></b>	<b><i>10</i></b>
Section 3.1	MARKINGS	10
Section 3.2	MARKING DESCRIPTIONS	12
Section 3.3	EMPTY BAG DIMENSIONS	14
Section 3.4	CONTAINERS WITH INCORRECT MARKINGS	14
	Marking Exhibits	15

## Part 1 COMMODITY SPECIFICATIONS

### Section 1.1 COMMODITIES

- A. The soy fortified sorghum grits when cooked by mixing one part by volume of the product with two parts by volume water, bringing the mixture to a boil, and boiling gently for 15-20 minutes, will be distinctly particulate (individual particles which adhere together to some extent after cooking but shall not disintegrate or otherwise lose their identity) but tender and palatable. They shall not be ropy or gluey.
- B. The product shall have a good characteristic taste and odor free from rancid, bitter, musty, sour, and other undesirable or foreign tastes and odors. In conformance with the chemical and physical requirements set forth in the table below:

**Soy-Fortified Sorghum Grits<sup>1</sup>**

Item	Requirements	
	Minimum	Maximum
Moisture	---	13.5%
Protein (Nx6.25) <sup>2</sup>	15.0%	---
Crude Fat <sup>2</sup>	---	2.0%
Crude Fiber <sup>2</sup>	---	2.1%
Total bacterial count per gram <sup>3</sup>	---	50,000
Material that will pass through a U.S. Standard No. 8 Woven-Wire-Cloth Sieve	90.0%	---
Material that will pass through a U.S. Standard No. 14 Woven-Wire-Cloth Sieve	---	35.0%
Material that will pass through a U.S. Standard No. 30 Woven-Wire-Cloth Sieve	---	5.0%

<sup>1</sup> All percentages are on the basis of weight.

<sup>2</sup> These limiting values are on a moisture-free basis.

<sup>3</sup> Bacterial plate count in excess of 500,000 per gram will constitute rejection. However, at contractor's request only, the following additional requirements will apply: If the bacterial plate count is higher than 50,000 per gram but not more than 500,000 per gram, product will be rejected, unless coliform count does not exceed 100 organisms per gram of product. If the bacterial plate count is higher than 500,000 per gram but not more than 1,000,000 per gram, product will be rejected, unless the product provided contains:

- (1) No more than 100 coliform per gram;
- (2) No more than 10 staph aureus per gram; or
- (3) No salmonella in 20 grams of product.

**Maximum Ash Allowable Without Discount  
at Specified Calcium Levels <sup>4</sup>**

Calcium Mg/lb.	Maximum Ash Percent	Calcium Mg/lb.	Maximum Ash Percent	Calcium Mg/lb.	Maximum Ash Percent
340-358	2.78	649-666	2.95	957-974	3.12
359-376	2.79	667-684	2.96	975-993	3.13
377-394	2.80	685-702	2.97	994-1011	3.14
395-412	2.81	703-720	2.98	1012-1029	3.15
413-430	2.82	721-739	2.99	1030-1047	3.16
431-448	2.83	740-757	3.00	1048-1065	3.17
449-466	2.84	758-775	3.01	1066-1083	3.18
467-485	2.85	776-793	3.02	1084-1101	3.19
486-503	2.86	794-811	3.03	1102-1120	3.20
504-521	2.87	812-829	3.04	1121-1138	3.21
522-539	2.88	830-847	3.05	1139-1156	3.22
540-557	2.89	848-866	3.06	1157-1174	3.23
558-575	2.90	867-884	3.07	1175-1192	3.24
576-593	2.91	885-902	3.08	1193-1210	3.25
594-612	2.92	903-920	3.09	1211-1228	3.26
613-630	2.93	921-938	3.10	1229-1247	3.47
631-648	2.94	939-956	3.11		

- C. Bacterial plate counts higher than 1,000,000 organisms per gram of product will be rejected. Cost of additional testing required for acceptance of product having plate counts in excess of 50,000 per gram will be for contractor’s account.

**Section 1.2 PRODUCT ENRICHMENT REQUIREMENTS**

- A. The product shall be blended thoroughly and homogeneously mixed calcium and other listed enrichment ingredients (1/2 oz./cwt. feed rate) in the following portions:

**Enrichment Ingredients**

Item	Requirements	
	Minimum	Maximum
Thiamine	2.0 mg/lb.	3.0 mg/lb.
Riboflavin	1.2 mg/lb.	1.8 mg/lb.
Niacin or niacinamide	16.0 mg/lb.	24.0 mg/lb.
Iron (reduced iron, 325 mesh to be used as the iron source)	13.0 mg/lb.	26.0 mg/lb.
Vitamin A-Palmitate <sup>5</sup>	8,800 IU/lb.	---

<sup>4</sup> Soy-fortified sorghum grits prior to calcium enrichment should have an ash content not exceeding 2.60% on a moisture –free basis.

<sup>5</sup> Vitamin A-Palmitate (stabilized) shall be added in encapsulated form containing 250,000 IU Vitamin A-Palmitate/g. Particle size shall comply with the requirement that at least 98 percent will pass through a U.S. Standard No. 50 sieve, at least 90 percent through a U.S. Standard No. 60 sieve, and at least 45 percent through a U.S. Standard No. 100 sieve. The product shall not be less than 95 percent of the all-trans isomer as determined by the USP assay procedure. The Vitamin A-Palmitate shall have storage stability such that not more than 20 percent of its original activity will be lost when stored for 21 days at 45° C in a sealed container at a target level of 11,000

Calcium (in harmless and assimilable form)	500 mg/lb.	750 mg/lb.
--	------------	------------

**B. Flavor Stability**

When used for fortifying soy-fortified sorghum grits at the level of 8,800 IU per pound, the Vitamin A-Palmitate preparation shall contribute no off-flavor or odor to the dry mix or to prepared cooked products.

- (1) The Vitamin A shall have been tested by the vitamin manufacturers in cornmeal or wheat flour having moisture content in the range of 13.5 to 14.0 percent to assure stability of the vitamin.
- (2) If the cornmeal is used for the stability test, the cornmeal used shall be enriched, degermed yellow cornmeal, fine granulation, conforming to requirements of Federal Specification N-C-521E for Type II, Class B, Granulation 2. The cornmeal shall be enriched to contain: 2.0 to 3.0 mg. thiamine per pound; 1.2 to 1.8 mg. riboflavin per pound; 16.0 to 24.0 mg. niacin or niacinamide per pound; 13.0 to 26 mg. iron per pound; and 500 to 750 mg. calcium per pound.
- (3) If wheat flour is used for the stability test the flour shall be of 65 to 75 percent extraction and shall be enriched to contain 2.0 to 2.5 mg. thiamine per pound; 1.2 to 1.5 mg. riboflavin per pound; 16.0 to 20.0 mg. niacin per pound; and 13.0 to 16.5 mg. iron per pound.

**Section 1.3 PROPORTIONS**

The ingredients contained in the blended product will be in the following proportions:

<b>Ingredients</b>	<b>Pounds Per 2,000 lb. Batch</b>
Sorghum grits, dehulled and degermed	1,700
Soy grits, defatted (toasted) or expeller	300
Total	2,000

**Section 1.4 INGREDIENT SPECIFICATIONS**

**A. Sorghum Grits**

- (1) **Material Processing**  
Sorghum grits will be milled from grain sorghum meeting the following requirements:
  - a. Class: Yellow or white grain sorghum as defined by “Official United States Standards for Grain,” except that the grain shall contain no more than two percent of kernels having brown subcoats. The standards are available at: <http://151.121.3.117/reference-library/standards/standards.htm>
  - b. Grade: U.S. No. 1, U.S. No. 2, or U.S. No. 3, if downgraded because of moisture only.
  - c. The grain shall be thoroughly cleaned to remove stones, sticks,

---

IU per pound in cornmeal or wheat flour having moisture content in the range of 13.5 to 14.5 percent.

trash, weed seeds, and shriveled kernels; dehulled; degermed; and reduced to grits.

- d. The sorghum shall be milled to remove seed coat so that the product color and general appearance will be that of typical sorghum grits which are reasonably well milled.

(2) Analysis

In conformance with the chemical and physical requirements set forth in the table below:

**Sorghum Grits  
Chemical and Physical Requirements<sup>6</sup>**

Item	Requirements	
	Minimum	Maximum
Moisture	---	13.5%
Protein (Nx6.25) <sup>7</sup>	9.0%	---
Crude Fiber <sup>7</sup>	---	1.8%
Ash <sup>7</sup>	---	1.8%
Material that will pass through a U.S. Standard No. 8 Woven-Wire-Cloth Sieve	90.0%	---
Material that will pass through a U.S. Standard No. 14 Woven-Wire-Cloth Sieve	---	26.0%
Material that will pass through a U.S. Standard No. 30 Woven-Wire-Cloth Sieve	---	5.0%
Material other than sorghum grits <sup>8</sup>	---	0.05%

B. Soy Grits, Defatted (Toasted) or Expeller

(1) Material and Processing

Soy grits, defatted (toasted) will be screened, coarsely ground product obtained from selected soybeans by cleaning, cracking, dehulling, tempering, flaking, defatting with hexane, desolventizing, deodorizing, toasting (full cook with color change to light yellow or golden buff), and cooling. In addition to the usual biological changes brought about by cooking of soybean protein products, this process tends to remove undesirable flavor compounds and change the color of the soy grits to a buff. Soy grits, expeller, will be screened, coarsely ground product obtained from selected soybeans by cleaning, cracking, dehulling, heating, and expeller change to golden buff or tan, and cooling.

(2) Analysis

In conformance with the chemical and physical requirements set forth in

<sup>6</sup> All percentage are on the basis of weight.

<sup>7</sup> These limiting values are on a moisture-free basis.

<sup>8</sup> Whole sorghum berries, weed seeds, etc.

the table below:

**Soy Grits – Defatted (Toasted) or Expeller**

Item	Requirements <sup>9</sup>	
	Minimum	Maximum
Moisture	---	12.0%
Protein (Nx6.25) <sup>10</sup>	50.0%	---
Crude Fat, defatted, toasted grits	---	1.0%
Crude Fat, expeller grits	5.0%	6.5%
Ash	---	7.0%
Crude Fiber	---	3.5%
Material that will pass through a U.S. Standard No. 8 Woven-Wire-Cloth Sieve	90.0%	---
Material that will pass through a U.S. Standard No. 14 Woven-Wire-Cloth Sieve	---	75.0%
Material that will pass through a U.S. Standard No. 30 Woven-Wire-Cloth Sieve	---	5.0%
Nitrogen Solubility Index	10.0%	30.0%
Urease activity, increase in pH	0.05	0.15
Total bacterial count	---	50,000/g
Color, defatted, toasted grits	Light yellow to golden	
Color, expeller grits	Golden to tan	
Odor	Neutral to nutty	
Taste	Pleasant, neutral to slightly nutty	
Texture	A reasonably uniform grit	

**Section 1.5 QUALITY ASSURANCE**

- A. The contractor shall perform the product testing and quality analysis to ensure that the product meets the commodity specifications. The results shall be evidenced by a Certificate of Analysis (COA). Copies of the original COA must be submitted as part of the invoice package. The COA shall provide the results of all tests specified. If quality discounts are provided in the contract, and the product to be delivered by the contractor falls within the quality discount table, those factors shall be identified by an asterisk on the copies of the COA.
  
- B. Contractors shall notify the Government immediately of lots that fail to meet contract requirements.
  
- C. Unless otherwise specified, test methods for the finished product, and any ingredients therein, shall be those of the AOAC INTERNATIONAL, the

<sup>9</sup> All percentages are on the basis of weight.

<sup>10</sup> These limiting values are on a moisture-free basis.

American Association of Cereal Chemists (AACC), or the American Oil Chemists' Society (AOCS), as applicable and in effect on the date of issuance of the solicitation, or in accordance with methods that give equivalent results.

**Section 1.6 QUALITY DISCOUNTS**

If the product to be delivered by the contractor does not meet the quality specifications required herein but falls within the discounts listed, the product may be delivered to the Government, but the purchase price will be reduced in accordance with the following schedule of discounts for each 100 pounds of commodity delivered:

<b>Excess Moisture</b>		<b>Deficient Protein</b>	
13.6% or 13.7%	\$0.10	14.9% or 14.8%	\$0.10
13.8% or 13.9%	\$0.20	14.7% or 14.6%	\$0.20
14.0%	\$0.35	14.5%	\$0.35
<b>Excess Crude Fat</b>		<b>Excess Ash</b>	
2.1% or 2.2%	\$0.10	2.7% or 2.8%	\$0.10
2.3% or 2.4%	\$0.20	2.9% or 3.0%	\$0.20
2.5%	\$0.35	3.1%	\$0.35
<b>Excess Crude Fiber</b>		<b>Deficient Granulation Through a No. 8 Sieve</b>	
2.2% or 2.3%	\$0.10	89% or 88%	\$0.10
2.4% or 2.5%	\$0.20	87% or 86%	\$0.20
2.6%	\$0.35	85%	\$0.35
<b>Excess Granulation Through a No. 14 Sieve</b>		<b>Excess Granulation Through a No. 30 Sieve</b>	
36% or 37%	\$0.10	5.1% thru 5.4%	\$0.10
38% or 39%	\$0.20	5.5% thru 5.8%	\$0.20
40% or 41%	\$0.35		

**Discounts for Excess Ash, Deficient and Excess Calcium**

<b>Excess Ash Percentage Points Above Max.</b>		<b>Deficient Calcium</b>		<b>Excess Calcium</b>	
.01% or .02%	\$0.10	499-440 mg/lb.	\$0.05	750-1247 mg/lb.	\$0.00
.03% or .04%	\$0.20	439-400 mg/lb.	\$0.10		
.05%	\$0.35	399-340 mg/lb.	\$0.20		

**Part 2 CONTAINER AND PACKAGING REQUIREMENTS**

**Section 2.1 GENERAL**

This part provides the container specifications and packaging materials requirements used under this contract.

**Section 2.2 CONTAINERS AND MATERIALS**

- A. All containers and packaging materials shall be manufactured and assembled in the United States. The components that make up the fabricating materials of the containers and packaging materials shall be of U.S. origin to the extent that they



are commercially available. Questions concerning the availability of a material should be directed to:

USDA/FSA/DACO  
Room 5755 – South Bldg, STOP 0551  
1400 Independence Avenue SW  
Washington, DC 20250-0551  
ATTN: Packaging

- B. Constructed to meet the requirements of the Food and Drug Administration (FDA) for safe contact with the packaged product.
- C. The contractor shall obtain and maintain documentation from the container or packaging material manufacturer to verify that the containers and packaging materials used in this contract were in compliance with the Government's requirements.

**Section 2.3 25-KILOGRAM MULTIWALL PAPER BAGS**

- A. Twenty-five kilograms of product shall be packed in Pinch Bottom Open Mouth (PBOM) style multiwall paper bags. The use of recycled materials is not required if performance or food safety is jeopardized.
- B. The bag shall have two inner walls of 50-pound nominal basis weight natural kraft paper and an outer third wall of 60-pound nominal basis weight wet strength paper in accordance with Uniform Freight Classification, Rule 40, Section 10, Tables A and B, as amended.
- C. The bag shall have a inner plastic liner constructed of linear low density polyethylene (LLDPE) film. The film liner shall:
  - (1) Be a minimum thickness of 2.5 mil. with a density of 0.914 to 0.929 g/cc and a minimum heat-seal coefficient of 0.60. The film shall have a minimum impact resistance of 265g when tested in accordance with ASTM D-1709 Method A, as amended, Falling Dart.
  - (2) The film liner shall have 8 to 12 micro perforations in each gusset area to allow for the evacuation of air from the product after filling and sealing.
  - (3) Have a sufficient amount of anti-block. It shall be free from any blocking at 50°C and not subject to reblock at 70°C.
  - (4) The film liner shall be loose for the full length of the bag except around the bottom and top closure areas. At the top and bottom closure areas, the liner shall adhere to the inner-most paper ply (time lamination). The laminating adhesive shall be machine direction applied in narrow strips no longer than 4 inches from each end. The use of gravure lamination to bond the liner to the inner-most paper ply for the entire length of the bag is prohibited.
  - (5) Be adhered to prevent product from getting between the inner film and the next outer paper ply.

- (6) Not exceed a maximum average water vapor permeability of 0.65 grams per 100 square inches in 24 hours at 90 percent relative humidity and a temperature of 100°F plus or minus 5 degrees.
- (7) Be manufactured to meet Food and Drug Administration requirements for food products (21 CFR 177.1520, as amended).
- (8) Be heat-sealed at the bottom by the bag manufacturer. However, as the top of the liner is not required to be heat-sealed, a non-heat sealed stepping pattern shall be used instead.

D. Longitudinal seams of the outer wall of the bag shall be glued so that there is no more than 3/16-inch of unglued edge on the outer surface of the bag. The adhesives used in the longitudinal seams and pasted end closures shall be water resistant. Water resistant adhesive of outer ply longitudinal seams or pasted end closures shall be tested for resistance to water in accordance with TAPPI T456 (Wet Tensile Test), except as follows:

Cut test specimens 1-inch wide so that the longitudinal seam or pasted end closure runs perpendicular to and is centered relative to the long dimension of the specimen. The test specimen shall encompass all adhesive bonded areas included in fabricating the seam or end closure. In the case of multi-ply end closures, clamp all plies in the jaws of the tester. Immerse the specimens in not less than 1-inch of the distilled water for 24 hours. Run a wet tensile test. A test specimen fails the test if failure occurs with the separation of the seam or closure and less than 25% of the separated adhesive area shows fiber tear. Failure of more than 10% of the specimens shall be reported as failure of the adhesive.

**Section 2.4 25-KILOGRAM HIGH PERFORMANCE PACKAGING CONSTRUCTIONS**

- A. Contractors shall utilize one of the following constructions when the solicitation requires the use of high performance packaging:
  - (1) Multiwall paper bag constructed of: One (1) ply inner film liner guaranteed 2.5 mil. minimum thickness linear low density polyethylene, four (4) plies of 50-pound natural multiwall kraft (NMK) paper, and one (1) outer ply of 60-pound wet strength natural multiwall kraft (WSNMK) paper; or
  - (2) Multiwall paper bag constructed of: 3.1 mil.(70 grams per square meter) film consisting of two or more layers of co-extruded polyolefin film with alternating angles of orientation, laminated together and biaxially oriented, two (2) plies of 50-pound NMK paper, and one (1) outer ply of 60-pound WSNMK paper. The bag shall be heat-sealed at the bottom by the bag manufacturer. However, as the top of the liner is not required to be heat-sealed, a non-heat sealed stepping pattern shall be used instead.
  - (3) Both bag constructions shall:
    - (a) be uniquely marked with a one (1) inch blue stripe located

- approximately three (3) inches above the letters “USA” and extending around the width of each bag;
- (b) meet the specifications and testing requirements outlined in these commodity requirements.

**Section 2.5 OUTER CLOSURE AND SEALS**

- A. The bottom and top of the 25-kilogram bag shall be closed to provide a tight seal using hot-melt or thermoplastic adhesive applied in a single band along the top edge of the long side of the bag and extending downward at least 3/4 inches. The fold line on the manufacturer closure end shall be 1-3/4 inches plus or minus 1/4-inch. The fold line on the field closure end shall be 1-5/8 inches plus or minus 1/4-inch. Refer to section 3.1.L. for bag closure guide location bars.
- B. The outer wall of the bag shall be stepped at the bottom and top fold over flap, beyond all inner walls, in order to provide a positive seal over the ends of the inner walls so that there is no more than 3/16 inches unbonded edge beyond the adhesive line. The inner polyethylene film may be heat-sealed.

**Section 2.6 PERFORMANCE TEST PROCEDURES**

- A. All bags shall be capable of withstanding the following performance test for impact resistance:
- (1) Ten filled and sealed bags shall each survive a single drop test on the butt and side on a shock machine that produces for each test a velocity change of 195 inches per second using a shock duration of .002 seconds without loss of product.
  - (2) Testing shall be conducted under standard temperature (73.4°F plus or minus 1.8°F) and relative humidity (50% plus or minus 2%) conditions.
  - (3) Filled bags shall be placed in the conditioned atmosphere for sufficient time before the tests are conducted for the bag materials to reach equilibrium.
  - (4) Bags submitted under this performance specification shall conform to all other applicable material, construction, and performance specifications.
- B. Test Laboratories  
Independent or private laboratories known to be capable of conducting the shock machine test described above are as follows:

Michigan State University School of Packaging East Lansing, MI 48824-1223 (517) 355-9580 <a href="http://packaging.msu.edu/">http://packaging.msu.edu/</a>	Lansmont Corporation 1287 Reamwood Sunnyvale, CA 94089 (408) 734-9724
	Lansmont Corporation 6539 Westland Way, Suite 24

	Lansing, MI 48917 (888) 526-7666 <a href="http://www.lansmont.com">www.lansmont.com</a>
Rutgers University Packaging Science and Engineering Dept. P.O. Box 909 Piscataway, NJ 08854 (201) 932-3679	Ten-E Packaging Services, Inc. 1666 County Road 74 Newport, MN 55055 (651) 459-0671 <a href="http://www.ten-e.com">www.ten-e.com</a>

**Section 2.7 SEAL PEEL TEST**

- A. The contractor shall perform periodic seal peel tests on the filling end of multiwall paper bags to determine whether the paper plies are adequately adhered. The seal peel test shall be performed at every start up and a minimum of every hour during commodity packing operations. The seal peel test shall demonstrate tear of paper fiber (fiber tear) for all paper plies. The contractor shall maintain records of seal peel test results for review by the Government.
  
- B. The seal peel test shall be performed as follows:
  - (1) Run an empty bag through the sealing unit.
  - (2) Cut bag approximately 3 to 8 inches below the seal.
  - (3) Cut both gussets along the center crease to the top of the bag end.
  - (4) Spread bag to expose poly liner.
  - (5) Check inside plastic liner along the closure and gussets to determine that the liner is heat-sealed. Pinholes, no larger than 1/8 inch in diameter, are allowable in the closure. (NOTE: This step is not required when the top of the liners in bags is not heat-sealed.)
  - (6) Grip inside fold at center of the bag end.
  - (7) Pull apart sides of the bag end at the center, separating seals. (If the seal is good, fibers shall completely cover adhesive. If the seal is poor, glossy adhesive will show).
  
- C. The contractor's seal peel test records shall include the following information for each test: date, time, employee's name, product, contract number, railcar number, and result of the test. The result of the test shall be reported as either "good seal" or "poor seal", "insufficient fiber tear", as applicable. The contractor shall take corrective action if the seal peel test indicates a poor seal and shall retest until a good seal is achieved.

**PART 3 MARKING REQUIREMENTS**

**Section 3.1 MARKINGS**

- A. The bags shall be marked in the color specified in the markings exhibits. Any markings not shown on the exhibits shall be printed in blue. When printed on the

bag, the colors blue and red shall match the Pantone Matching System (PMS) chart numbers 280 and 200, respectively, to the extent practicable.

- B. All dimensions are approximate. Unless otherwise specified, all characters shall be in normal block print.
- C. The letters USA shall be Univers black (75) oblique, or Helvetica extra bold with 70% scaling and -70 tracking or equivalent to match the style as shown in the exhibits. The letters USA shall be 4 3/4 inches high and 9 3/4 inches in total width. The three stripes adjacent USA shall be 1 inch high and must extend to the edge of the panel.
- D. The USAID logo shall be printed in the same style as shown in the exhibits. The logo shall be sized approximately 4 5/8 inches in diameter. The USDA logo shall be 4 1/2 inches high and 6 1/2 inches in total width. See exhibits.
- E. The commodity name shall be 1 1/4 inch print. Immediately below the commodity name on the front and back panels, insert additional commodity description in 5/8 inch print, if applicable.
- F. The contract number and the statement "NOT TO BE SOLD OR EXCHANGED" shall be 3/4 inch print. The net weight, bag dimensions, and the Standard Marking Requirements (SMR) or Language Marking Requirements (LMR) number shall be centered at the bottom of the bag in 1/2 inch print. See exhibits. The contractor shall obtain a waiver, in writing, from the Government to print the contract number using on-line printing on filled bags.
- G. The US Flag shall be 5 inches high and 9 inches in total width, on the back of the applicable bag. See exhibits.
- H. The letters or symbols used in the language markings for LMR-1, LMR-3 and LMR-4, LMR-5, LMR-7, and LMR-8 should be sized approximately 1 5/8 inches. The language markings for LMR-2 and LMR-6 should be sized to fit. See exhibits.
- I. Lot numbers, production codes or any other means of identification required to meet the traceability requirement shall be printed as small as possible, yet legible.
- J. Gussets. The letters USA shall be 3 inches high and printed in both gussets.
- K. Bag Closure Guide Location Bars (BCGL) shall be printed on the front panel of all multi-wall paper bags, as shown in the exhibits. The BCGL bars shall be plainly visible, approximately one inch in length, printed in blue in two parallel rows evenly spaced over the entire width of the bag. The BCGL bars are to be used as visual quality control verification. Visually identifying two bars or no bars on the bag would indicate a bag closure failure. Visually identifying one bar

would indicate a proper bag closure. (Exhibits A & B)

### **Section 3.2 MARKING DESCRIPTIONS**

The Government shall furnish required markings within two business days after the date of the contract. The procurement of containers should be deferred for at least two business days after the date of the contract.

The following standard marking requirements may be requested under the contract:

#### Standard Marking Requirement #1 (SMR-1)

##### **USAID – Distribution**

Front: USA with stripes, the commodity name, the words "NOT TO BE SOLD OR EXCHANGED," USAID logo, contract number, net weight, dimensions, "SMR-1". See exhibit SMR-1, front.

Back: US Flag in place of the USA with stripes, otherwise same as front. See exhibit SMR-1, back.

#### Standard Marking Requirement #2 (SMR-2)

##### **FAS - Distribution**

Front: USA with stripes, the commodity name, the words "NOT TO BE SOLD OR EXCHANGED," USDA logo, contract number, net weight, dimensions, "SMR-2". See exhibit SMR-2, front.

Back: Identical. See exhibit SMR-2, back.

#### Standard Marking Requirement #3 (SMR-3)

##### **USAID – Monetization**

Front: USA with stripes, the commodity name, USAID logo, contract number, net weight, dimensions, "SMR-3". See exhibit SMR-3, front.

Back: US Flag in place of the USA with stripes, otherwise, same as front. See exhibit SMR-3, back.

#### Standard Marking Requirement #4 (SMR-4)

##### **FAS or USAID - Monetization**

Front: USA with stripes, the commodity name, contract number, net weight, dimensions, "SMR-4". See exhibit SMR-4, front.

Back: Identical. See exhibit SMR-4, back.

#### Language Marking Requirement #1 (LMR-1)

##### **USAID – Distribution for North Korea**

Front: USA with stripes, the commodity name, the words "NOT TO BE SOLD OR EXCHANGED," USAID logo, contract number, net weight, dimensions, and "LMR-1.". See exhibit LMR-1, front.

Back: US Flag, the commodity name, North Korean language panel, and "LMR-1" only. See exhibit LMR-1, back.

#### Language Marking Requirement #2 (LMR-2)

**USAID – Distribution for Afghanistan, with Pashtu and Dari**

Front: USA with stripes, the commodity name, the words "NOT TO BE SOLD OR EXCHANGED," USAID logo, contract number, net weight, dimensions, and "LMR-2." See exhibit LMR-2, front.

Back: US Flag, the commodity name, Pashtu and Dari language panel, and "LMR-2" only. See exhibit LMR-2, back.

Language Marking Requirement #3 (LMR-3)

**USAID – Distribution for South Africa Region**

Front: USA with stripes, the commodity name, the words "NOT TO BE SOLD OR EXCHANGED," USAID logo, contract number, net weight, dimensions, and "LMR-3." See exhibit LMR-3, front.

Back: US Flag, the commodity name, English language panel, and "LMR-3" only. See exhibit LMR-3, back.

Language Marking Requirement #4 (LMR-4)

**USAID – Distribution for Iraq with Arabic**

Front: USA with stripes, the commodity name, the words "NOT TO BE SOLD OR EXCHANGED," USAID logo, contract number, net weight, dimensions, and "LMR-4." See exhibit LMR-4, front.

Back: US Flag, the commodity name, Arabic language panel, and "LMR-4" only. See exhibit LMR-4, back.

Language Marking Requirement #5 (LMR-5)

**FAS – Distribution for North Korea**

Front: USA with stripes, the commodity name, the words "NOT TO BE SOLD OR EXCHANGED," USDA logo, contract number, net weight, dimensions, and "LMR-5." See exhibit LMR-5, front.

Back: USA with stripes, the commodity name, North Korean language panel, and "LMR-5" only. See exhibit LMR-5, back.

Language Marking Requirement #6 (LMR-6)

**FAS – Distribution for Afghanistan, with Pashtu and Dari**

Front: USA with stripes, the commodity name, the words "NOT TO BE SOLD OR EXCHANGED," USDA logo, contract number, net weight, dimensions, and "LMR-6." See exhibit LMR-6, front.

Back: USA with stripes, the commodity name, Pashtu and Dari language panel, and "LMR-6" only. See exhibit LMR-6, back.

Language Marking Requirement #7 (LMR-7)

**FAS – Distribution for South Africa Region**

Front: USA with stripes, the commodity name, the words "NOT TO BE SOLD OR EXCHANGED," USDA logo, contract number, net weight, dimensions, and "LMR-7." See exhibit LMR-7, front.

Back: USA with stripes, the commodity name, English language panel, and "LMR-7" only. See exhibit LMR-7, back.

Language Marking Requirement #8 (LMR-8)

**FAS – Distribution for Iraq with Arabic**

Front: USA with stripes, the commodity name, the words "NOT TO BE SOLD OR EXCHANGED," USDA logo, contract number, net weight, dimensions, and "LMR-8." See exhibit LMR-8, front

Back: USA with stripes, the commodity name, Arabic language panel, and "LMR-8" only. See exhibit LMR-8, back.

**Section 3.3 EMPTY BAG DIMENSIONS**

- A. All bags shall be marked with the empty dimensions as follows:

Gusseted Bags	Face Width X Gusseted Width X Finished Length
Flat Tube Bags	Face Width X Finished Length

- B. The bag dimensions shall be centered at the bottom of the bag, as small as possible, yet legible.

**Section 3.4 CONTAINERS WITH INCORRECT MARKINGS**

- A. Any labels, bags, cans, can lids, cases, or any other type of packaging (hereinafter referred to as "containers") displaying incorrect markings may be used under a Government contract provided that the incorrect markings are obliterated and correct markings are applied in a permanent manner with approval of the contracting officer.
- B. The appearance of containers in commercial or other channels either filled or unfilled bearing markings identifying the containers as part of a Government contract may cause the Government expense in determining whether commodities have been diverted from authorized use and in answering inquiries. The contractor shall take all necessary action to prevent the appearance in commercial or other channels of containers and container materials bearing any markings required under a Government contract, including those held by the contractor or others; e.g., overruns, misprints, etc. The contractor shall ensure that any container from a Government contract that appears in commercial or other channels shall have all markings required under this contract permanently obliterated.



SMR-1

FRONT

USAID - Distribution (Feb. 2005)

-----



**SOY FORTIFIED  
SORGHUM GRITS**

NOT TO BE SOLD OR EXCHANGED



**CONTRACT ABCD01234**  
NET WEIGHT: 25 kg, 55.115 lb.  
16 x 4 x 37  
SMR-1

**USA**

SMR-1

BACK

USAID - Distribution (Feb. 2005)



**SOY FORTIFIED  
SORGHUM GRITS**

NOT TO BE SOLD OR EXCHANGED



**CONTRACT ABCD01234**  
NET WEIGHT: 25 kg, 55.115 lb.  
16 x 4 x 37  
SMR-1

**USA**

-----

**USA**

**SOY FORTIFIED  
SORGHUM GRITS**

NOT TO BE SOLD OR EXCHANGED

**USDA**

**CONTRACT ABCD01234**  
NET WEIGHT: 25 kg, 55.115 lb.  
16 x 4 x 37  
SMR-2

**USA**

**USA**

**SOY FORTIFIED  
SORGHUM GRITS**

NOT TO BE SOLD OR EXCHANGED

**USDA**

**CONTRACT ABCD01234**  
NET WEIGHT: 25 kg, 55.115 lb.  
16 x 4 x 37  
SMR-2

**USA**

-----



**SOY FORTIFIED  
SORGHUM GRITS**



**CONTRACT ABCD01234**  
NET WEIGHT: 25 kg, 55.115 lb.  
16 x 4 x 37  
SMR-3

**USA**



**SOY FORTIFIED  
SORGHUM GRITS**



**CONTRACT ABCD01234**  
NET WEIGHT: 25 kg, 55.115 lb.  
16 x 4 x 37  
SMR-3

**USA**



-----



**SOY FORTIFIED  
SORGHUM GRITS**

NOT TO BE SOLD OR EXCHANGED



**CONTRACT ABCD01234**  
NET WEIGHT: 25 kg, 55.115 lb.  
16 x 4 x 37  
LMR-1

**USA**



**SOY FORTIFIED  
SORGHUM GRITS**

미국에서  
보내온 선물

LMR-1

**USA**

-----



**SOY FORTIFIED  
SORGHUM GRITS**

NOT TO BE SOLD OR EXCHANGED



**CONTRACT ABCD01234**  
NET WEIGHT: 25 kg, 55.115 lb.  
16 x 4 x 37  
LMR-2

**USA**



**SOY FORTIFIED  
SORGHUM GRITS**

د امریکا د متحده ایالاتو  
د خلکو سوغات

تحفهء مردم  
ایالات متحده امریکا

LMR-2

**USA**

-----



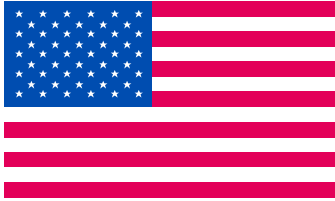
**SOY FORTIFIED  
SORGHUM GRITS**

NOT TO BE SOLD OR EXCHANGED



**CONTRACT ABCD01234**  
NET WEIGHT: 25 kg, 55.115 lb.  
16 x 4 x 37  
LMR-3

**USA**



**SOY FORTIFIED  
SORGHUM GRITS**

**Gift of the People of the  
United States of America**

LMR-3

**USA**

-----

**USA**

**SOY FORTIFIED  
SORGHUM GRITS**

NOT TO BE SOLD OR EXCHANGED



**CONTRACT ABCD01234**

NET WEIGHT: 25 kg, 55.115 lb.

16 x 4 x 37

LMR-4

**USA**



**SOY FORTIFIED  
SORGHUM GRITS**

هدية من  
الشعب الأمريكي

LMR-4

**USA**



-----

**USA**

**SOY FORTIFIED  
SORGHUM GRITS**

NOT TO BE SOLD OR EXCHANGED

**USDA**



**CONTRACT ABCD01234**

NET WEIGHT: 25 kg, 55.115 lb.

16 x 4 x 37

LMR-5

**USA**

**USA**

**SOY FORTIFIED  
SORGHUM GRITS**

미국에서  
보내온 선물

LMR-5

**USA**

-----

**USA**

**SOY FORTIFIED  
SORGHUM GRITS**

NOT TO BE SOLD OR EXCHANGED

**USDA**



**CONTRACT ABCD01234**

NET WEIGHT: 25 kg, 55.115 lb.

16 x 4 x 37

LMR-6

**USA**

**USA**

**SOY FORTIFIED  
SORGHUM GRITS**

د امریکا د متحده ایالاتو  
د خلکو سوغات

تحفهء مردم  
ایالات متحده امریکا

LMR-6

**USA**

-----




**SOY FORTIFIED  
SORGHUM GRITS**

NOT TO BE SOLD OR EXCHANGED



**CONTRACT ABCD01234**  
NET WEIGHT: 25 kg, 55.115 lb.  
16 x 4 x 37  
LMR-7

**USA**



**SOY FORTIFIED  
SORGHUM GRITS**

**Gift of the People of the  
United States of America**

LMR-7

**USA**

-----



**SOY FORTIFIED  
SORGHUM GRITS**

NOT TO BE SOLD OR EXCHANGED



**CONTRACT ABCD01234**  
NET WEIGHT: 25 kg, 55.115 lb.  
16 x 4 x 37  
LMR-8

**USA**



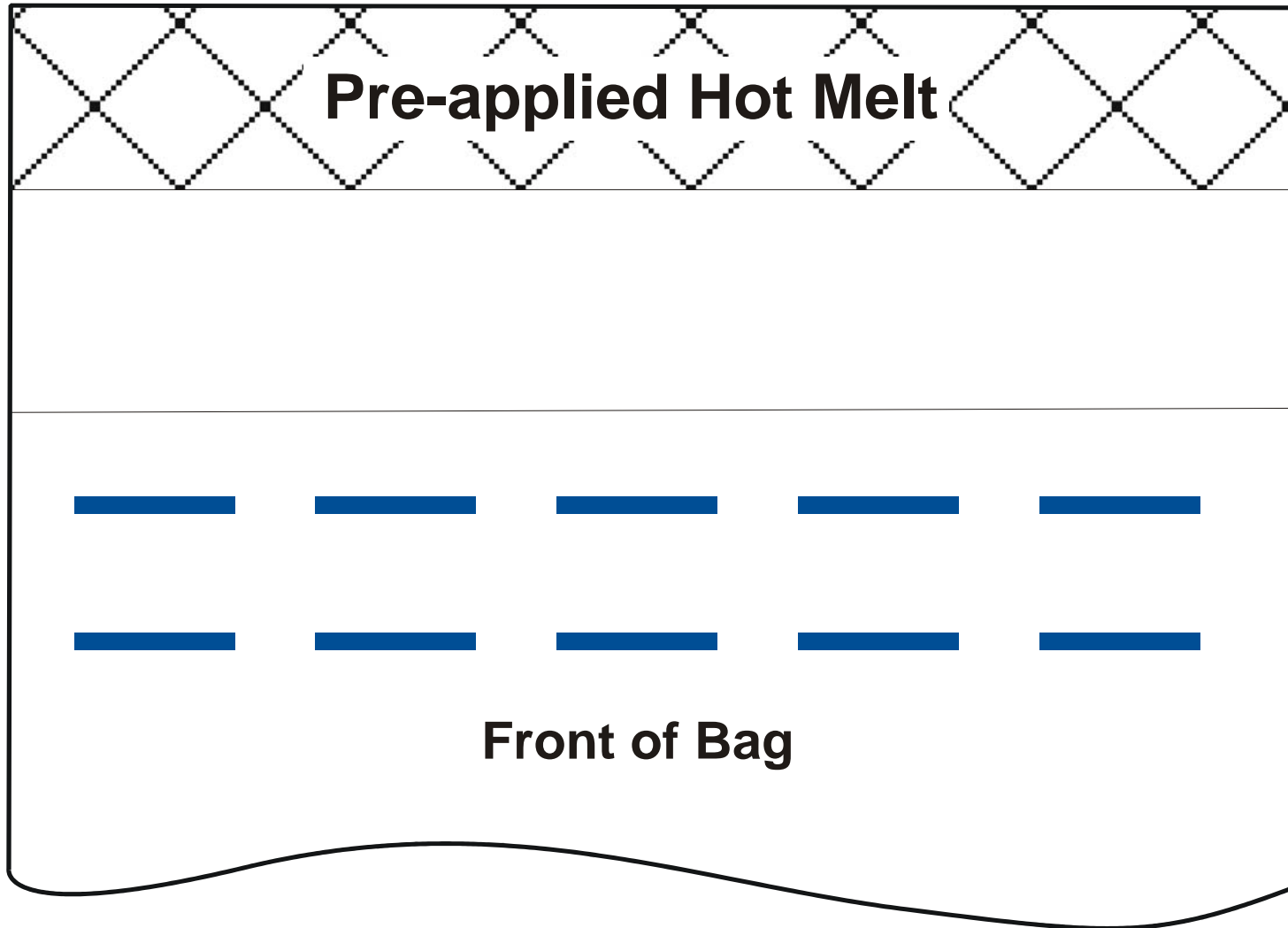
**SOY FORTIFIED  
SORGHUM GRITS**

هدية من  
الشعب الأمريكي

LMR-8

**USA**

## Bag Closure Guide Location



**High Performance Bags:**  
1 inch blue stripe

