

UNITED STATES
DEPARTMENT OF
AGRICULTURE

EFFECTIVE: February 1, 2005

COMMODITY
CREDIT
CORPORATION

KANSAS CITY
COMMODITY OFFICE
P.O. BOX 419205
KANSAS CITY, MO 64141-6205

APPENDIX 2

Packaging and Marking Specifications

ANNOUNCEMENTS:
BWSF8, KCBG5, MR17, PBL7, WFBF1

**FOR THE PURCHASE OF
COMMODITIES IN 50 KG BAGS
FOR USE IN EXPORT PROGRAMS**



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APPENDIX 2 FOR THE PURCHASE OF COMMODITIES IN 50 KG BAGS

Packaging and Marking Specifications

PART 1. BASIC PROVISIONS

1.1 PURPOSE

- A. This appendix outlines the packaging and marking requirements, container specifications, and procedures for the approval of containers and packaging materials used in shipments for use export food donation programs.
- B. This appendix supersedes all previous packaging requirements and specifications outlined in handbooks, announcements, or notices.
- C. Changes to this appendix will be issued periodically in the form of amendments to the announcement. Contractors are advised to ensure that all subcontractors, e.g., container and packaging material manufacturers, are familiar with the requirements on a contract-by-contract basis.

1.2 USDA RESPONSIBILITIES

- A. The Deputy Administrator, Commodity Operations (DACO), USDA-FSA, Washington, DC, is responsible for approving the use of all containers and packaging materials.
- B. The contractor is responsible for assurance that product and packaging meet specifications in this appendix.
- C. The Kansas City Commodity Office (KCCO) is responsible for accepting or rejecting commodities, containers, and packaging materials on a contract-by-contract basis.

1.3 APPROVAL OF ALTERNATIVE PACKAGING

- A. To request approval of alternative container or packaging material, commodity suppliers or package manufacturers must submit a written request to DACO, including the construction specification and any supporting evidence of performance such as:
 - (1) Laboratory test data.
 - (2) Reports of field testing.
 - (3) History of successful use in commercial channels.
 - (4) Environmental impact.

- B. The supporting evidence must show that the proposed alternative container or packaging material will perform as well as the container(s) or packaging material(s) currently specified and authorized for use.
- C. The proposed alternative container or packaging material must have an environmental impact equal to or less than the container(s) or packaging material(s) currently specified and authorized for use. DACO will evaluate the total life cycle of the proposed alternative container or packaging material and will consider the environmental impact of each stage from manufacture, through its use, to waste management (reuse, recycle, or disposal).
- D. In response to requests, DACO will do one or more of the following:
 - (1) Request that samples of the container or packaging material be sent for evaluation to a package testing laboratory designated by DACO.
 - (2) Require test shipments of filled containers.
 - (3) Deny the use of the container or packaging material.
 - (4) Authorize the use of the container or packaging material, in writing, based on the information submitted, environmental impact evaluation, and/or completion of successful testing. The written authorization must be retained in contractor's records and made available to the Total Quality Systems Audit (TQSA) auditors or KCCO contracting officers upon request.

1.4 INQUIRIES

Inquiries concerning these specifications or the approval of alternative containers should be directed to:

USDA/FSA/DACO
STOP 0551
Room 5775 – South Bldg
1400 Independence Avenue SW
Washington, DC 20250-0551
ATTN: Packaging

1.5 LIABILITY

In accordance with Article 60 of USDA-1, CCC's contractor will be liable if containers or packaging materials do not meet contract requirements.

1.6 INQUIRIES FOR FEDERAL SPECIFICATIONS AND STANDARDS

For copies of referenced Federal specifications and standards contact:

GSA Federal Supply Service Bureau
Specifications Section (3FBP-W)
470 East L'Enfant Plaza SW, Suite 8100
1400 Independence Avenue SW
Washington, DC 20407
Phone: 202-619-8925

PART 2. GENERAL REQUIREMENTS

2.1 CONTAINERS AND MATERIALS

- A. Unless otherwise specified, all containers and packaging materials must be:
- (1) Constructed as specified in this appendix and any referenced specifications, or as authorized in writing by DACO.
 - (2) New and made of components and by processes which will not impart an odor, flavor, color, or other objectionable characteristic to the product being packaged.
 - (3) Constructed to meet the requirements of the Food and Drug Administration (FDA) for safe contact with the packaged product. In addition, all containers and packaging materials shall be constructed to comply with the sum concentration levels of lead, cadmium, mercury, and hexavalent chromium addressed by the Coalition of Northeast Governors (CONEG) model legislation.

The sum of the concentration levels of lead, cadmium, mercury and/or hexavalent chromium present in any package or packaging component shall not exceed 100 parts per million. Concentration levels shall be determined using American Standard of Testing Materials test methods, as revised, or U.S. Environmental Protection Agency test methods for evaluating solid waste, S-W 846, as revised.
 - (4) All ingredients and additives used to manufacture the fabric and/or bags must be 100 percent domestic origin. In addition, the polymer used must be 100 percent virgin polymer with no recycled material. Rework product will be limited to excess material produced during the initial extrusion process and will be limited to the amount produced during normal continuous operation. A system to identify and document this process must be in place for review during TQSA program audits.
 - (5) Stored and transported in a manner that will prevent damage and deterioration and is suitable for the packaging of food products.

- B. All containers and packaging materials must be manufactured and assembled in the United States. The components that make up the fabricating materials of the containers and packaging materials must 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
Contract Management Branch
STOP 0551
Room 5755 – South Bldg.
1400 Independence Avenue SW
Washington, DC 20250-0551
Phone: 202-720-5074
ATTN: Packaging

- C. The contractor shall obtain and maintain documentation to verify that the containers and packaging materials used in this contract were in compliance with the Government's requirements.
- D. Filled containers must be safe for individuals coming in contact with them during handling, stacking, and storage operations.
- E. The weight capacity of a container, e.g., 50 kg bag, is defined as a container designed to hold 50 kilograms of product.

PART 3. CONTAINER AND PACKAGING REQUIREMENTS

3.1 50-KILOGRAM WOVEN POLYPROPYLENE BAGS

- A. Woven polypropylene fabric AND Circular-woven style bags
- (1) The manufacturer and fabric construction must be authorized for use, in writing, by DACO.
 - (2) The color of the fabric must be white, unless otherwise specified. Colored identifying marker yarn(s) must be woven into the fabric by the manufacturer. The color(s) of the marker yarn(s) must be approved, in writing by DACO. Information on approval of manufacturer and associated marker yarn will be posted on the USDA, FSA, DACO, Internet page at:
<http://www.fsa.usda.gov/daco/pdd/bags.htm>
 - (3) The polymer in the fabric must be 100 percent virgin polypropylene.
 - (4) The fabric in an unstressed state must permit a minimum air flow of 3 cubic feet per minute per square foot and a maximum of 30 cubic feet per minute per square foot, when tested in accordance with ASTM Test Method D737, as amended.
 - (5) The fabric must be finished by coating or other suitable method to prevent slippage. Individual test results must be 28 degrees or greater, when tested in accordance with TAPPI Test Method T-503-OM-84. The fabric must accept and retain printing ink that will not rub or flake off to a degree where legibility is impaired.
 - (6) The fabric must be capable of resisting ultraviolet deterioration for a minimum of 200 hours of exposure in a weatherometer, when tested in accordance with Test Method 5804-Federal Standard 191, as amended. The fabric must retain 70 percent of its original minimum tensile strength in each direction, after 200 hours exposure, when tested in accordance with Test Method ASTM D 5034 (Grab Test), as amended.
 - (7) Bags may be flat tube or gusseted.
 - (8) Bags may be extrusion coated. Extrusion coated bags must have the proper number, size and location of micro perforations to achieve the air permeability rate required for product stability and fumigation, as well as filling efficiency.

3.2 SEWING OF BAG SEAMS

- A. All bag seams must be sewn in a manner which prevents the product from leaking through the seams during handling, storage, and distribution.

- B. The color of the sewing thread must be natural or white. The tensile strength of the sewn seams must not be less than the tensile strength of the fabric in the body of the bag.
- C. The top and bottom of the bag must be heat cut or otherwise finished to prevent fraying or unraveling of the fabric during distribution. The bottom seam must be constructed in accordance with Federal Standard 751a, SSn-1 Single Turnover, as amended. A minimum of 4 stitches per inch is required.

3.3 PERFORMANCE TEST PROCEDURES

- A. All bags must be capable of withstanding the following performance test for impact resistance:
 - (1) Ten filled and sealed bags must 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 must 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 must be placed in the conditioned atmosphere for sufficient time before the tests are conducted for the bag materials to come to equilibrium.
 - (4) Bags submitted under this performance specification must 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 in paragraph 3.3 are as follows:

- | | |
|--|---|
| <ul style="list-style-type: none"> (1) Lansmont Corporation
1287 Reamwood
Sunnyvale, CA 94089
(408) 734-9724
www.lansmont.com | <ul style="list-style-type: none"> (3) Rutgers University
Packaging Science and
Engineering Dept.
P.O. Box 909
Piscataway, NJ 08854
(201) 932-3679 |
| <ul style="list-style-type: none"> (2) Michigan State University
School of Packaging
East Lansing, MI 48824-1223
(517) 355-9580 | <ul style="list-style-type: none"> (4) Ten-E Packaging Services, Inc.
1666 County Road 74
Newport, MN 55055
(612) 459-1430 |

3.4 TEST FREQUENCY

- A. All testing specified in this appendix must be performed and documented to qualify a fabric/bag construction for approval by DACO and in accordance with the frequencies outlined below. The fabric construction and test results must be submitted to DACO for review. All approvals will be confirmed in writing.
- B. The air permeability and ultraviolet resistance tests must, as a minimum, be performed annually and when a change in the formulation/design of the fabric is being made.
- C. The performance test for impact resistance must be performed when a change in the formulation/design of the fabric is being made.
- D. The slide angle test must, as a minimum, be performed in-house for every 10,000 lineal meters of fabric production. Testing performed in-house is not required to be performed under the specified temperature and humidity requirements. In addition, the slide angle test must, as a minimum, be performed annually by an outside testing facility and when a change in the formulation/design of the fabric is being made. This testing must be performed in accordance with all contract requirements, including the specified temperature and humidity.
- E. USDA will periodically require suppliers to submit Declaration Sheets which describe the construction, origin, and test results of approved fabric/bags. Declaration sheets must also be submitted when a change in the formulation/design of the fabric is being made. A blank Declaration Sheet can be obtained from KCCO/Bulk Commodities Division.
- F. All supporting test and quality control documentation must be retained and made available for review by USDA for a minimum of three years after final payment under the contract.
- G. USDA will periodically obtain samples of bags produced under contract and submit the samples for testing to verify that the bags were produced in accordance with the contract requirements. USDA will be responsible for the cost of testing bags determined to be constructed in compliance. Suppliers will be responsible for the cost of testing bags determined not to be in compliance and in-plant audits by USDA personnel to determine if corrective actions have been taken.
- H. A change in the formulation/design of the fabric requires approval by DACO, in writing, in accordance with Part 1, paragraphs 1.3 and 1.4 of this appendix.

PART 4. MARKING REQUIREMENTS

4.1 MARKINGS

- A. The bags must be marked in the color specified in the markings exhibits. Any markings not shown on the exhibits must be printed in blue. When printed on the bag, the colors blue and red must 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 must be in normal block print.
- C. The letters USA must 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 must be 6-1/2 inches high, and 12-1/2 inches in total width. The three stripes adjacent USA must be 1-1/4 inches high and printed as close to the edges of the bag as possible, not to exceed 1-1/2 inches from any edge.
- ✓.. D. The USAID logo must be printed in the same style as shown in the markings exhibits, sized approximately 6-1/4 inches in diameter. The USDA logo must be 5-1/2 inches ..✓ high and 7-3/4 inches in total width, see exhibits.
- E. The commodity name must be 1-1/2 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 net weight, contract number and the statement "NOT TO BE SOLD OR EXCHANGED" must be 3/4 inch print. The contract number, net weight, and ..✓ Standard Marking Requirement (SMR) or Language Marking Requirement (LMR) number should be at the bottom of the bag, centered, see exhibits. The SMR or LMR number and the bag dimensions must be centered at the bottom of the bag as small as possible yet legible, see exhibits.
- G. The symbol indicating "USE NO HOOKS" must be 2-3/4 inches in height.
- H. The US Flag must be 7 inches high and 12-3/4 inches in total width, on the back of the applicable bag, see exhibits.
- I. The language markings for LMR-1, LMR-3, LMR-4, LMR-5, LMR-7, and LMR-8, should be sized approximately 1-5/8 inches, see exhibits. The language marking for LMR-2 and LMR-6 should be sized to fit as shown in the exhibits.
- J. Lot numbers, production codes or any other means of identification required to meet the traceability requirement for TQSA or FGIS must be printed as small as possible, yet legible.

4.2 MARKING EXHIBITS

The Kansas City Commodity Office will 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," and use no hooks symbol. 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", and use no hooks symbol. 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," and use no hooks symbol. 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," and use no hooks symbol. 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" and use no hooks symbol. 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" and use no hooks symbol. 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" and use no hooks symbol. 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" and use no hooks symbol. 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" and use no hooks symbol. 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" and use no hooks symbol. 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" and use no hooks symbol. 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" and use no hooks symbol. See exhibit LMR-8, front.

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

4.3 EMPTY BAG DIMENSIONS

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

Gusseted Bags

Face Width X Gusset Width X Finished Length

Flat Tube Bags

Face Width X Finished Length

- B. The dimensions should be printed at the bottom of the bag, centered, see exhibits.
- C. The finished size of the circular woven polypropylene bags will be determined by the contractor, unless otherwise specified by the contracting officer.

4.4 CONTAINERS WITH INCORRECT MARKINGS

- A. Containers displaying incorrect markings may be used provided that the incorrect markings are obliterated and correct markings are applied in a permanent manner with approval of the Contracting Officer.
- B. The contractor must take necessary action, in accordance with USDA-1, Article 62, to prevent the appearance in commercial or other channels of containers and container materials bearing markings required under the contract, including those held by the contractor or others, e.g., overruns, misprints.



COMMODITY NAME

NOT TO BE SOLD OR EXCHANGED

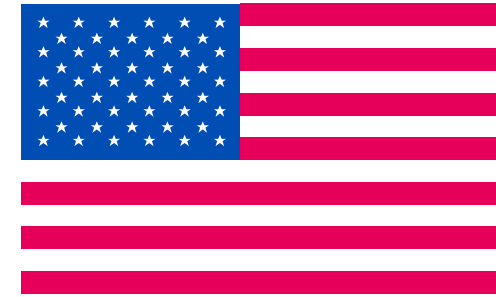


CONTRACT ABCD01234

NET WEIGHT: 50 kg, 110.23 lb.

23 x 39

SMR-1



COMMODITY NAME

NOT TO BE SOLD OR EXCHANGED



CONTRACT ABCD01234

NET WEIGHT: 50 kg, 110.23 lb.

23 x 39

SMR-1





COMMODITY NAME

NOT TO BE SOLD OR EXCHANGED



CONTRACT ABCD01234

NET WEIGHT: 50 kg, 110.23 lb.

23 x 39

SMR-2



COMMODITY NAME

NOT TO BE SOLD OR EXCHANGED



CONTRACT ABCD01234

NET WEIGHT: 50 kg, 110.23 lb.

23 x 39

SMR-2





COMMODITY NAME

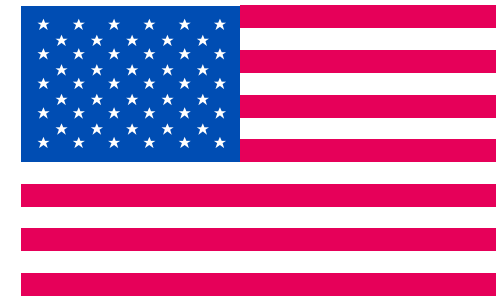


CONTRACT ABCD01234

NET WEIGHT: 50 kg, 110.23 lb.

23 x 39

SMR-3



COMMODITY NAME



CONTRACT ABCD01234

NET WEIGHT: 50 kg, 110.23 lb.

23 x 39

SMR-3





COMMODITY NAME



CONTRACT ABCD01234

NET WEIGHT: 50 kg, 110.23 lb.

23 x 39

SMR-4



COMMODITY NAME



CONTRACT ABCD01234

NET WEIGHT: 50 kg, 110.23 lb.

23 x 39

SMR-4



COMMODITY NAME

NOT TO BE SOLD OR EXCHANGED

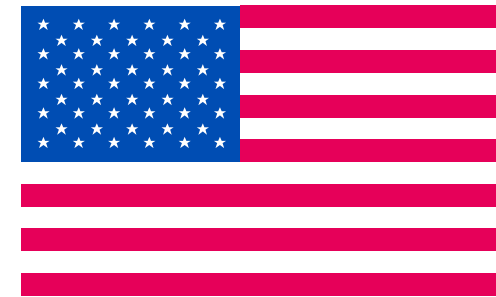


CONTRACT ABCD01234

NET WEIGHT: 50 kg, 110.23 lb.

23 x 39

LMR-1



COMMODITY NAME

미국에서
보내온 선물

LMR-1



COMMODITY NAME

NOT TO BE SOLD OR EXCHANGED

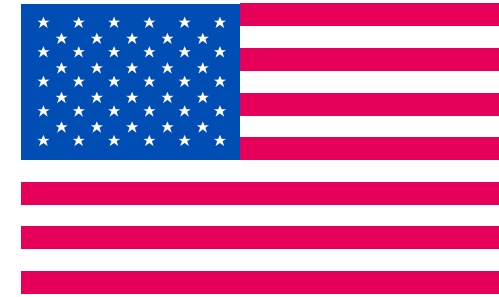


CONTRACT ABCD01234

NET WEIGHT: 50 kg, 110.23 lb.

23 x 39

LMR-2



COMMODITY NAME

د امریکا د متحده ایالاتو
د خلکو سوغات

تحفه مردم

ایالات متحده امریکا

LMR-2



COMMODITY NAME

NOT TO BE SOLD OR EXCHANGED

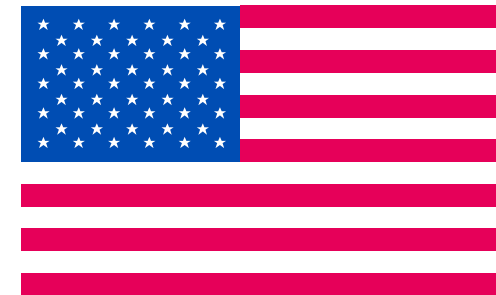


CONTRACT ABCD01234

NET WEIGHT: 50 kg, 110.23 lb.

23 x 39

LMR-3



COMMODITY NAME

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

LMR-3



COMMODITY NAME

NOT TO BE SOLD OR EXCHANGED

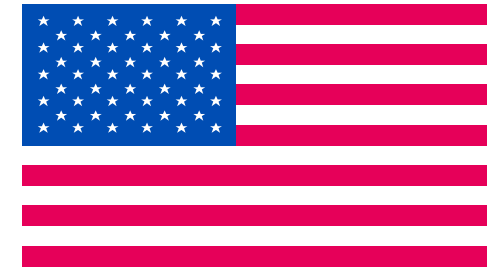


CONTRACT ABCD01234

NET WEIGHT: 50 kg, 110.23 lb.

23 x 39

LMR-4



COMMODITY NAME

هدية من
الشعب الأمريكي

LMR-4



COMMODITY NAME

NOT TO BE SOLD OR EXCHANGED



CONTRACT ABCD01234

NET WEIGHT: 50 kg, 110.23 lb.

23 x 39

LMR-5



COMMODITY NAME

미국에서
보내온 선물

LMR-5



COMMODITY NAME

NOT TO BE SOLD OR EXCHANGED



CONTRACT ABCD01234

NET WEIGHT: 50 kg, 110.23 lb.

23 x 39

LMR-6



COMMODITY NAME

د امریکا د متحده ایالاتو
د خلکو سوغات

تحفه مردم
ایالات متحده امریکا

LMR-6



COMMODITY NAME

NOT TO BE SOLD OR EXCHANGED



CONTRACT ABCD01234

NET WEIGHT: 50 kg, 110.23 lb.

23 x 39

LMR-7



COMMODITY NAME

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

LMR-7



COMMODITY NAME

NOT TO BE SOLD OR EXCHANGED



CONTRACT ABCD01234

NET WEIGHT: 50 kg, 110.23 lb.

23 x 39

LMR-8



COMMODITY NAME

هدية من
الشعب الأمريكي

LMR-8