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WITHDRAWN NBS Voluntary Product Standard

A UNITED STATES
DEPARTMENT OF
COMMERCE
PUBLICATION



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Portable Picnic Coolers

A Voluntary Standard
Developed by Producers,
Distributors, and Users
With the Cooperation of the
National Bureau of Standards

U.S.
DEPARTMENT
OF
COMMERCE

National
Bureau
of Standards

UNITED STATES DEPARTMENT OF COMMERCE

Maurice H. Stans, *Secretary*

NATIONAL BUREAU OF STANDARDS

Lewis M. Branscomb, *Director*

Voluntary Product Standard

PS 49-71

Portable Picnic Coolers

Technical Standards Coordinator: Charles B. Phucas

Abstract

This Voluntary Product Standard covers portable picnic coolers in which the smallest of the internal dimensions exceeds 6 inches and the total continuous volume exceeds 1.1 cubic feet. Included in the Standard are requirements relating to the construction of coolers and to the closures, release devices, and handles of picnic coolers. A test for determining the force required to release the closure is included also. Methods of identifying products which conform to the Standard are provided.

For the purposes of this Standard, the term "picnic cooler" shall be used to include "beverage coolers," "ice chests," portable "food chests," and the like, which are designed to be carried by an individual.

Key words: Coolers, portable picnic; picnic coolers, portable; portable picnic coolers.

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VOLUNTARY PRODUCT STANDARDS

Voluntary Product Standards are standards developed under procedures established by the Department of Commerce (15 CFR Part 10, as amended, May 28, 1970). The standards may include (1) dimensional requirements for standard sizes and types of various products, (2) technical requirements, and (3) methods of testing, grading, and marking. The objective of a *Voluntary Product Standard* is to establish requirements which are in accordance with the principal demands of the industry and, at the same time, are not contrary to the public interest.

Development of a VOLUNTARY PRODUCT STANDARD

The Office of Engineering Standards Services of the National Bureau of Standards has been assigned by the Department of Commerce the responsibility to work closely with scientific and trade associations and organizations, business firms, testing laboratories, and other appropriate groups to develop *Voluntary Product Standards*. The Bureau has the following role in the development process: It (1) provides editorial assistance in the preparation of the standard; (2) supplies such assistance and review as is required to assure the technical soundness of the standard; (3) acts as an unbiased coordinator in the development of the standard; (4) sees that the standard is representative of the views of producers, distributors, and users or consumers; (5) seeks satisfactory adjustment of valid points of disagreement; (6) determines the compliance with the criteria established in the Department's procedures cited above; and (7) publishes the standard. Industry customarily (1) initiates and participates in the development of a standard; (2) provides technical counsel on a standard; and (3) promotes the use of, and support for, the standard. (A group interested in developing a *Voluntary Product Standard* may submit a written request to the Office of Engineering Standards Services, National Bureau of Standards, Washington, D.C. 20234.)

A draft of a proposed standard is developed in consultation with interested trade groups. Subsequently, a Standard Review Committee is established to review the proposed standard. The committee, appropriately balanced, includes qualified representatives of producers, distributors, and users or consumers of the product being standardized. When the committee approves a proposal, copies are distributed for industry consideration and acceptance. When the acceptances show general industry agreement, and when there is no substantive objection deemed valid by the Bureau, the Bureau announces approval of the *Voluntary Product Standard* and proceeds with its publication.

Use of a VOLUNTARY PRODUCT STANDARD

The adoption and use of a *Voluntary Product Standard* is completely voluntary. *Voluntary Product Standards* have been used most effectively in conjunction with legal documents such as sales contracts, purchase orders, and building codes. When a standard is made part of such a document, compliance with the standard is enforceable by the purchaser or the seller along with other provisions of the document.

Voluntary Product Standards are useful and helpful to purchasers, manufacturers, and distributors. Purchasers may order products that comply with *Voluntary Product Standards* and determine for themselves that their requirements are met. Manufacturers and distributors may refer to the standards in sales catalogs, advertising, invoices, and labels on their product. Commercial inspection and testing programs may also be employed, together with grade labels and certificates assuring compliance, to promote even greater public confidence. Such assurance of compliance promotes better understanding between purchasers and sellers.

Portable Picnic Coolers

Effective July 19, 1971 (See section 6.)

(This Standard has been developed under the *Procedures for the Development of Voluntary Product Standards*, published by the U.S. Department of Commerce. See Section 7, *History of Project*, for further information.)

1. PURPOSE

The purpose of this Voluntary Product Standard is to establish nationally recognized safety requirements for portable picnic coolers which will effectively prevent the entrapment of small children.

2. SCOPE

This Voluntary Product Standard covers portable picnic coolers in which the smallest of the internal dimensions exceeds 6 inches and the total continuous volume exceeds 1.1 cubic feet. Included in the Standard are requirements relating to the construction of coolers and to the closures, release devices, and handles of picnic coolers. A test for determining the force required to release the closure is included also. Methods of identifying products which conform to the Standard are provided.

For the purposes of this Standard, the term "picnic cooler" shall be used to include "beverage coolers," "ice chests," portable "food chests," and the like, which are designed to be carried by an individual.

3. REQUIREMENTS

3.1. General—All products represented as complying with this Voluntary Product Standard shall meet all of the requirements specified herein.

3.2. Construction—Any cooler having a continuous volume greater than 1.1 cubic feet and the smallest of its internal dimensions greater than 6 inches, shall have either a means of opening the cooler from inside or a partition or bars (two or more) which will effectively limit the continuous space by making the smallest internal dimension less than 6 inches. The partition or bars shall be an integral part of the cooler so that any attempted removal would destroy the utility of the cooler.

3.3. Closures—Automatic locking devices shall not be used. Closures (i.e., lids, covers, and doors) shall be one of the following types:

- a. friction type closures,
- b. magnetic type closures, or
- c. closures which require deliberate manipulation.

3.4. Release force—All closures, or release devices which allow the closure or portion thereof to be opened from the inside (e.g., latch releases, hinge releases, and knock-out panels), shall release with a force of not more than 10 pounds. The release force shall be applied and measured as specified in 4.2.

3.5. Latch releases and hinge releases—Latch or hinge release devices shall be capable of being reassembled and shall not be so releaseable as to affect the utility of the picnic coolers.

3.6. Knock-out panels—Knock-out panels shall be a minimum of 8 inches wide and 12 inches long and be centrally located in the closure.

3.7. Devices requiring deliberate manipulation—Devices for securing closures (e.g., latches, handles, and straps) which require deliberate external manipulation shall be permitted, provided that the closures can meet the requirements specified in 3.4 when such devices are in their normal securing position.

4. INSPECTION AND TEST PROCEDURES

4.1. Test conditions—The empty cooler shall be conditioned for not less than 24 hours at $70 \pm 10^\circ$ F and shall be tested at this temperature.

4.2. Release force measurement—The test shall be conducted with the closure in its normal closed position. All measurements shall be made perpendicular to the closure when it is in a horizontal position. The force measurements shall be made by means of a force gage having a calibrated accuracy within ± 0.3 pounds when measuring a force of 10 pounds. The minimum graduated interval of the dial of the gage shall not exceed 0.2 pound, and the full-scale range shall not exceed 30 pounds. The force shall be applied as indicated in either a, b, or c below; *however, in no case shall the force be applied more than 5 inches from the center of the cooler:*

a. Hinged closures—If the closure is hinged, the force shall be applied at a point located midway between the center of the closure and the edge having the release device.

b. Nonhinged closures—If the closure is not hinged, the force shall be applied at a point located midway between the center of the closure and the edge of the closure (in the case of rectangular closures, "edge" refers to either of the long edges).

c. Knock-out panels—In the case of a knock-out panel, the force shall be applied to the panel between the center and the long edge

of the closure (1) at a point on the edge of the panel or (2) at a point on the panel midway between the center and the edge of the closure, whichever provides the shorter distance from the center.

5. IDENTIFICATION

In order that purchasers may identify products conforming to all requirements of this Voluntary Product Standard, producers and distributors may include a statement of compliance in conjunction with their name and address on product labels, invoices, sales literature, and the like. The following statement is suggested when sufficient space is available:

This picnic cooler conforms to the safety requirements established in Voluntary Product Standard PS 49-71, developed cooperatively with the industry and published by the National Bureau of Standards under the *Procedures for the Development of Voluntary Product Standards* of the U.S. Department of Commerce. Full responsibility for the conformance of this product to the standard is assumed by (name and address of producer or distributor).

The following abbreviated statement is suggested when available space on labels is insufficient for the full statement:

Conforms to the safety requirements of PS 49-71, (name and address of producer or distributor).

6. EFFECTIVE DATE

The effective date of this Voluntary Product Standard is the date upon which reference to the Standard may be made by producers, distributors, users and consumers, and other interested parties. Compliance by producers with the requirements of this Voluntary Product Standard may not actually occur until some time after its effective date. Products shall not be represented as conforming to this Voluntary Product Standard until such time as all applicable requirements established in the Standard are met. The effective date of this Standard is July 19, 1971.

7. HISTORY OF PROJECT

At a meeting on February 25, 1970, producers of portable picnic coolers and representatives of the Department of Commerce discussed the need for a standard for coolers to prevent the entrapment of small children. Subsequently, it was agreed that a standard should be developed under the *Procedures for the Development of Voluntary Product Standards*.

Based on the recommendation of the Standard Review Committee, composed of producers, distributors, and users of picnic

coolers, the Standard was circulated to all known producers, and to a representative list of distributors and users of the product to determine its acceptability. The response to this circulation indicated a consensus of acceptability as defined in the Voluntary Product Standards procedures.

On June 29, 1971, the Standard, designated PS 49-71, *Portable Picnic Coolers*, was approved for publication by the National Bureau of Standards to be effective July 19, 1971.

Technical Standards Coordinator:

Charles B. Phucas, Office of Engineering Standard Services,
National Bureau of Standards,
Washington, D.C. 20234

8. STANDING COMMITTEE

The individuals whose names are listed below constitute the membership of the Standing Committee for this Standard. The function of the committee is to review all proposed revisions and amendments in order to keep this Standard up to date. Comments concerning this Standard and suggestions for its revision may be addressed to any member of the committee or to the Office of Engineering Standards Services, National Bureau of Standards, Washington, D.C. 20234, which acts as secretary for the committee.

Representing Producers

Mr. Norman Schumacker, Amoco Chemicals Corporation, 214 Third Avenue, Waltham, Massachusetts 02154
Mr. Bernie Judd, King-Seeley Thermos Company, Thermos Division, Thermos Avenue, Norwich, Connecticut 06360
Mr. Robert Knapp, Knapp-Monarch-Nesco-Sparklet, Bent & Potomac Streets, St. Louis, Missouri 63116
Mr. Darrell Lawless, Texas Tennessee Industries, Inc., 100 West Belt Drive, P.O. Box 19322, Houston, Texas 77024
Mr. M. Rheume, Constroms Manufacturing, Inc., 4225 Hiawatha Avenue, Minneapolis, Minnesota 55406
Mr. Bernard Sharp, Poloron Products, Inc., 165 Huguenot Street, New Rochelle, New York 10801
Mr. Wilbur J. Townsend, The Coleman Company, Inc., 250 North St. Francis, Wichita, Kansas 67201
Mr. Robert White, The Hamilton-Skotch Corporation, 3915 St. Clair Avenue, Cleveland, Ohio 44114

Representing Distributors

Mr. Marcel Moone, The Tool Shed Hardware Store, 516 North Frederick Avenue, Gaithersburg, Maryland 20760
Mr. Norman Pugh, Sears, Roebuck and Company, 925 South Homan Avenue, Chicago, Illinois 60645
Mr. Andrew Rains, Peoples Drug Stores, Inc., 60 Florida Avenue, NE., Washington, D.C. 20002
Mr. John Spomer, J. L. Hudson Company, 1206 Woodward Avenue, Detroit, Michigan 48226
Mr. Paul Tannehill, Sales Equipment and Packaging Section, Marketing Services Department, Coca Cola Company, P.O. Box 1734, Atlanta, Georgia 30301
Mr. Robert J. Youngblood, National Sporting Goods Association, 717 North Michigan Avenue, Chicago, Illinois 60611

Representing Consumers

Miss Jan Armstrong, Department of Agricultural Economics, Room 572, Krannert Building, Purdue University, Lafayette, Indiana 47907
Miss Helen Birchard, 4 Wagoner Road, Saratoga Springs, New York 12866
Mrs. Roy C. Fosberg, 279 Princeton Street, Hartford, Connecticut 06106
Mrs. Charlotte Montgomery, 240 Watchung Fork, Westfield, New Jersey 07090
Dr. Marilyn Story, 1512 Maplewood Street, Cedar Falls, Iowa 50613
Mrs. Kay Valory, 3663 Mt. Diablo Road, Lafayette, California 94549

Representing General Interest

- Mr. Richard D. Early, Office of Compliance, Bureau of Product Safety, Food and Drug Administration, 200 C Street, SW., Washington, D.C. 20204
- Mr. Patrick Mellon, Chief of Detectives, Police Department, County of Suffolk, Hauppauge, New York 11787
- Mr. P. Robilotta, Hardlines Branch, Headquarters Army and Air Force Exchange Service, Procurement Division, Dallas, Texas 75222
- Mr. A. F. Schaplowsky, Injury Control Branch, Division of Planning and Standards, U.S. Public Health Service, 5555 Ridge Avenue, Cincinnati, Ohio 45213
- Mr. Donald E. Schroeder, Franklin County Sheriff's Department, Union, Missouri 63084
- Mr. Michael Spiotto, Department of Police, City of Chicago, 1121 South State Street, Chicago, Illinois 60605

9. ACCEPTORS

The producers, distributors, users, and others listed below have individually indicated in writing their acceptance of this Voluntary Product Standard prior to its publication. The acceptors have indicated their intention to use this Standard as far as practicable but reserve the right to depart from it when necessary. The list is published to show the extent of recorded public support for this Standard.

PRODUCERS

- Amoco Chemicals Corporation, Waltham, Massachusetts
- Covey Corporation, Dallas, Texas
- Cronstroms Manufacturing, Inc., Minneapolis, Minnesota
- Hamilton-Skotch Corporation, Cleveland, Ohio
- Igloo Corporation, Houston, Texas
- King-Seeley Thermos Company, Norwich, Connecticut
- Knapp-Monarch, Division of the Hoover Company, St. Louis, Missouri
- Poloron Products, Inc., New Rochelle, New York
- Polyfoam Packers Corporation, Chicago, Illinois
- Weber Plastics, Stevens Point, Wisconsin

DISTRIBUTORS

- American Hardware Supply Company, Butler, Pennsylvania
- Baker Hardware Company, Gary, Indiana
- Barker-Jennings Corporation, Lynchburg, Virginia
- Bostwick-Braun Company, The, Toledo, Ohio
- Bush-Caldwell Company, Little Rock, Arkansas
- Clary Wholesale Company, Akron, Ohio
- Cutters Wholesale, Meadville, Pennsylvania
- Fields, J. M., Inc., New York, New York
- Gambles, Inc., Minneapolis, Minnesota
- Giant Food, Inc., Washington, D.C.
- Gibson Products Company, Natchitoches, Louisiana
- Hardware Distributing Company, Seattle, Washington
- Henkle & Joyce Hardware Company, Inc., Lincoln, Nebraska
- Howe & Company, Beaver, Pennsylvania
- Milhender Distributing Company, Cranston, Rhode Island
- Pay'n Takit, Inc., Vancouver, Washington
- Sams Cut Rate, Inc., Detroit, Michigan
- Valley View Department Store, Brookfield, Ohio

CONSUMERS

- Apollazzo, Charles, Lexington, Massachusetts
- Armstrong, Jan, Lafayette, Indiana
- Armstrong, Mary, Union, New Jersey
- Arnold, Icesy, Rock Hill, South Carolina
- Bert, Clara Virginia, Havana, Florida
- Birchard, Helen, Saratoga Springs, New York
- Bishop, Myra, Knoxville, Tennessee
- Brady, Mildred, Chesapeake, Virginia
- Burkart, Audrey, Ridgefield, New Jersey
- Burton, John, Willimantic, Connecticut
- Christian, Johnie, Denton, Texas
- Dorsey, Martha, Flemingsburg, Kentucky
- Emanuel, Frank, Burlington, Vermont
- Eppright, Margaret, Austin, Texas
- Farmer, LaVerne, Knoxville, Tennessee
- Fine, Sam, Annandale, Virginia
- Fitzsimmons, Cleo, Lafayette, Indiana
- Fowler, Evelyn Sue, Lafayette, Indiana
- Fuller, Amelia, Richmond, Virginia
- Furr, Elizabeth, Palmetto, Florida
- Gibbs, Janett, Jefferson City, Tennessee
- Grabinski, Joanne, Kalamazoo, Michigan
- Hallaway, Joann, Kent, Ohio
- Hamilton, Coradel, Lafayette, Indiana
- Hassenplug, Louise, Rock Hill, South Carolina
- Hotchkin, Gary, Honolulu, Hawaii
- Hoysler, Vernon, Glencoe, Minnesota
- Hunt, Myrtle, St. Petersburg, Florida
- Johnson, Lydia, Frankfort, Kentucky
- Johnson, Robert, Lafayette, Indiana
- Johnston, Mescal, Little Rock, Arkansas
- Keefe, Dennis, Athens, Georgia
- Kilpatrick, Julia, Oneonta, New York
- Knapp, Patricia, Las Cruces, New Mexico
- Krebs, June, Hays, Kansas
- Krofta, Janet, Orono, Maine
- LaBelle, Oliver, Waterbury, Connecticut
- Macaulley, Rubye, Athens, Ohio
- Marshall, Eunice, Burlington, Vermont
- Marty, Mamie, Rochester, New Hampshire
- Maynard, Ruth, Milledgeville, Georgia
- McDonald, Rebecca, Newark, Ohio
- Miller, Helen, Laramie, Wyoming
- Montgomery, Charlotte, Westfield, New Jersey
- Moore, Mary, Orlando, Florida
- Nagy, Marilyn, Orchard Lake, Michigan

Nantz, Evelyn, College Park, Maryland
Nichols, Addeen, University Park, Pennsylvania
Nyman, Edith, Logan, Utah
Perloff, Robert, Pittsburgh, Pennsylvania
Pfaffin, Mrs. James, Coram, New York
Polesky, John, Indiana, Pennsylvania
Porcher, Katrina, Greensboro, North Carolina
Quentzel, David, New York, New York
Rikkola, Roger, Hamilton, New York
Rindlaub, Jean, Englewood, New Jersey
Roberts, Helen, Manhattan, Kansas
Rose, Eithel, Montevallo, Alabama

Rupert, Lois, Harrisburg, Pennsylvania
Rush, Anna, Clifton, New Jersey
Smith, Georgia, Fargo, North Dakota
Stecker, Lois, Raleigh, North Carolina
Trieshmann, Helmuth, South Plainfield, New Jersey
Wade, Marilyn, St. Albans, Vermont
Warriner, Wayne, Wethersfield, Connecticut
Wilgus, Virginia, Hattiesburg, Mississippi
Wilson, Helen, Warren, Michigan
Worth, Clarence, Mt. Holly, New Jersey
Zancanella, James, Laramie, Wyoming

GENERAL INTEREST

Chaucer, Daniel, New York, New York
Cissell, Helen, Cincinnati, Ohio
Elash, Jonathan, Alliance, Ohio

Florman, Monte, Mt. Vernon, New York
Lazar, L. S., Jersey City, New Jersey

FEDERAL, STATE, AND LOCAL GOVERNMENTS

Agriculture, U.S. Department of, Washington, D.C.
District of Columbia, Department of General Services, Bureau of Procurement, Washington, D.C.
General Services Administration, Washington, D.C.

Health, Education, and Welfare, U.S. Department of, Rockville, Maryland
Nassau County, Consumer Affairs, Mineola, New York
Naval Facilities Engineering Command, Washington, D.C.
Pennsylvania, Commonwealth of, Harrisburg, Pennsylvania

TO THE ACCEPTOR

The following statements answer the usual questions arising in connection with the acceptance of a Voluntary Product Standard and its significance:

1. *Enforcement*—Voluntary Product Standards contain requirements which are established by mutual consent of those concerned in accordance with the *Procedures for the Development of Voluntary Product Standards* published by the Department of Commerce (15 CFR Part 10, as amended, May 28, 1970). The standards provide a common basis of understanding among producers, distributors, and users or consumers. The National Bureau of Standards has *no* regulatory power in the enforcement of the provisions of voluntary standards, but since these standards represent the will of the interested groups as a whole, their provisions soon become established as trade customs and become effective when the standards are referenced in sales contracts, procurement specifications, government regulations, and the like.

2. *The Responsibility of the Acceptor*—The purpose of Voluntary Product Standards is to establish, for specific items, nationally recognized sizes, grades, material requirements, or performance criteria. The benefits that result from these standards will be in direct proportion to general recognition and actual use of the standards. Instances will occur when it may be necessary to deviate from a standard. The signing of an acceptance does not preclude such departures. The acceptor's signature, however, indicates an intention to follow the standard, where practicable, in the production, distribution, or use and consumption of the product in question.

WITHDRAWN

ACCEPTANCE OF VOLUNTARY PRODUCT STANDARD

PS 49-71, PORTABLE PICNIC COOLERS

This form properly completed, signed, and returned will show your acceptance of this *Voluntary Product Standard*.

Date _____

Office of Engineering Standards Services
National Bureau of Standards
U.S. Department of Commerce
Washington, D.C. 20234

Gentlemen:

We are primarily engaged in the following segment of the industry:

(Please check only one.)

- | | |
|---------------------------------------|---|
| <input type="checkbox"/> Production | <input type="checkbox"/> Use/consumption |
| <input type="checkbox"/> Distribution | <input type="checkbox"/> General Interest |

We believe that this *Voluntary Product Standard* constitutes a useful standard of practice, and we plan to use it as far as practicable. *However*, we reserve the right to depart from the standard as we deem advisable.

We understand, of course, that only those products which actually conform to the standard in all respects may be represented as conforming thereto.

Signature of authorized officer _____

(Please type or print the following.)

Name and title of above officer _____

Organization _____

(Fill in exactly as it should be listed.)

Street Address _____

City, State, and ZIP Code _____

(Note: Separate acceptances should be filed for each subsidiary company and affiliate which is to be listed as an acceptor.)

(Cut on this line)

NATIONAL BUREAU OF STANDARDS

The National Bureau of Standards¹ was established by an act of Congress March 3, 1901. The Bureau's overall goal is to strengthen and advance the Nation's science and technology and facilitate their effective application for public benefit. To this end, the Bureau conducts research and provides: (1) a basis for the Nation's physical measurement system, (2) scientific and technological services for industry and government, (3) a technical basis for equity in trade, and (4) technical services to promote public safety. The Bureau consists of the Institute for Basic Standards, the Institute for Materials Research, the Institute for Applied Technology, the Center for Computer Sciences and Technology, and the Office for Information Programs.

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Office of Standard Reference Data—Office of Technical Information and Publications—Library—Office of Public Information—Office of International Relations.

¹ Headquarters and Laboratories at Gaithersburg, Maryland, unless otherwise noted; mailing address Washington, D.C. 20234.

² Part of the Center for Radiation Research.

³ Located at Boulder, Colorado 80302.

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NBS Special Publication 305, Supplement 1, Publications of the NBS, 1968-1969. When ordering, include Catalog No. C13.10:305. Price \$4.50; \$1.25 additional for foreign mailing.