

DEPARTMENT OF COMMERCE
NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY
OFFICE OF STANDARDS SERVICES

PRODUCT STANDARD PS23-70
HORTICULTURAL GRADE PERLITE

Product Standard PS23-70, Horticultural Grade Perlite, was withdrawn by the U.S. Department of Commerce on January 20, 1982.

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For guidance and assistance for additional information
(i.e., standards for quality and application of perlite)
and related materials and other sources, please contact:

The Perlite Institute Inc.
1924 North Second Street
Harrisburg, PA 17102 USA
tel. 717-238-9723 fax. 717-238-9985
Email: info@perlite.org

PS23-70 file

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National Bureau of Standards

Status Report on Voluntary Product Standards

AGENCY: National Bureau of Standards; Commerce.

ACTION: Maintenance, retention, replacement, and withdrawal of certain voluntary product standards

On August 19, 1980, the Department of Commerce (Department) announced in the Federal Register (45 FR 55250-2) the status of 80 documents classified as Voluntary Product Standards. The announcement was made in accordance with the revised Procedures for the Development of Voluntary Product Standards (15 CFR Part 10). Section 10.0(b) of the Procedures specifies six criteria that must be met for the Department to sponsor the development or maintenance of a Voluntary Product Standard.

Numerous requests to retain or maintain various standards were received in response to the August 19, 1980, notice. A number of the requests specified retention of standards for fixed periods of time that have now elapsed. The current status of all such standards is indicated below.

Based on proposals from the proponent organizations identified after the following titles, the following product standards will continue to be sponsored by the Department:

- PS 1-74, Construction and Industrial Plywood; American Plywood Association
- PS 20-70, American Softwood Lumber Standard; American Lumber Standards Committee
- PS 72-76, Toy Safety; Toy Manufacturers of America
- PS 73-77, Carbonated Soft Drink Bottles; Glass Packaging Institute
- TS 231, Proposed Voluntary Product Standard, Production of Carbonated Soft Drinks in Glass Bottles; National Soft Drink Association

Based on documented activity within a private standards-writing organization, the following standards will be retained by the National Bureau of Standards for the periods of time stated below to permit the orderly transfer of sponsorship of such standards from the Department to the identified organizations. The periods of time stated below shall commence from the date this notice is published in the Federal Register and supersede the periods of time stated for those standards in the August 19, 1980 notice.

- PS 30-70, School Chalk; the Crayon, Water Color and Craft Institute, Inc.; 6 months
- PS 36-70, Body Measurements for the Sizing of Boys' Apparel; Mail Order Association of America; 12 months

- PS 42-70, Body Measurements for the Sizing of Women's Patterns and Apparel; Mail Order Association of America; 12 months
- PS 45-71, Body Measurements for the Sizing of Apparel for Young Men (Students); Mail Order Association of America; 12 months
- PS 46-71, Flame-Resistant Paper and Paperboard; American Society for Testing and Materials; 6 months
- PS 51-71, Hardwood and Decorative Plywood; Hardwood Plywood Manufacturers Association; 12 months
- PS 54-72, Body Measurements for the Sizing of Girls' Apparel; Mail Order Association of America; 12 months
- PS 63-75, Latex Foam Mattresses for Hospitals; American Society for Testing and Materials; 12 months
- PS 64-75, School Paste; The Crayon, Water Color and Craft Institute, Inc.; 6 months
- PS 65-75, Paints and Inks for Art Education in Schools; The Crayon, Water Color and Craft Institute, Inc.; 6 months
- PS 67-76, Marking of Gold Filled and Rolled Gold Plate Articles Other Than Watchcases; Jewelers Vigilance Committee; 24 months
- PS 68-76, Marking of Articles Made of Silver in Combination with Gold; Jewelers Vigilance Committee; 24 months
- PS 69-76, Marking of Articles Made Wholly or in Part of Platinum; Jewelers Vigilance Committee; 24 months
- PS 70-76, Marking of Articles Made of Karat Gold; Jewelers Vigilance Committee; 24 months
- PS 71-76, Marking of Jewelry and Novelties of Silver; Jewelers Vigilance Committee; 24 months
- CS 98-62, Artists Oil Paints; Artists Equity Association, Inc.; 6 months
- CS 130-62, Color Materials for Art Education in Schools; the Crayon, Water Color and Craft Institute, Inc.; 6 months
- CS 151-50, Body Measurements for the Sizing of Apparel for Infants, Babies, Toddlers and Children (for the Knit Underwear Industry); Mail Order Association of America; 12 months
- R 192-63, Crayons and Related Art Materials for School Use (Types, Sizes, Packages and Colors); The Crayon, Water Color and Craft Institute, Inc.; 6 months

The following standard has been replaced by a standard being developed or published by a private standards-writing organization and, therefore, Department of Commerce sponsorship is no longer needed for it:

- PS 17-69, Polyethylene-sheeting (construction, industrial and agricultural applications); Society of the Plastics Industry

→ In the absence of any request for retention or maintenance, the following standards are withdrawn:

- PS 13-69, Uncorded Slab Urethane Foam for Bedding and Furniture Cushioning
- PS 15-69, Custom Contact-Molded Reinforced Polyester Chemical-Resistant Process Equipment

- * PS 23-70, Horticultural Grade Perlite

- PS 24-70, Melamine Dinnerware (Alpha-Cellulose Filled) for Household Use
- PS 25-70, Heavy-Duty Alpha-Cellulose-Filled Melamine Tableware
- PS 27-70, Mosaic-Parquet Hardwood Slat Flooring
- PS 29-70, Plastic Heat-Shrinkable Film
- PS 31-70, Polystyrene Plastic Sheet
- PS 34-70, Fluorinated Ethylene-Propylene (FEP) Plastic-Lined Steel Pipe and Fittings
- PS 52-71, Polytetrafluorethylene (PTFE)
- PS 53-72, Glass-Fiber Reinforced Polyester Structural Plastic Panels
- PS 56-73, Structural Glued Laminated Timber
- PS 57-73, Cellulosic Fiber Insulation Board
- PS 58-73, Basic Hardboard
- PS 59-73, Prefinished Hardboard Paneling
- PS 60-73, Hardboard Siding
- PS 62-74, Grading of Diamond Powder in Sub-Sieve Sizes
- CS 138-55, Insect Wire Screening
- CS 192-53, General Purpose Vinyl Plastic Film
- CS 201-55, Rigid Polyvinyl Chloride Sheets
- CS 227-59, Polyethylene Film
- CS 245-62, Vinyl-Metal Laminates
- CS 257-63, TFE-Fluorocarbon (Polytetrafluorethylene) Resin Molded Basic Shapes
- CS 268-65, Hide-Trim Pattern for Domestic Cattlehides
- CS 274-66, TFE-Fluorocarbon Resin Sintered Thin Coatings for Dry Film Lubrication
- R2-62, Bedding Products and Components

In accordance with § 10.1(e) of the revised Procedures for the Development of Voluntary Product Standards and by agreement with the Consumer Product Safety Commission, the Department will retain sponsorship of the following Voluntary Product Standard for the period of time stated below to allow for arrangements to be made for its sponsorship by a private standards writing organization.

- PS 66-75, Safety Requirements for Home Playground Equipment; 12 months

For further information contact Eric A. Vadelund, Office of Engineering Standards, National Bureau of Standards, Washington, D.C. 20234. Telephone: (301) 921-3272.

Dated: January 13, 1982.

Ernest Ambler,

Director.

[FR Doc. 82-1316 Filed 1-19-82; 8:45 am]

BILLING CODE 3510-13-M

A UNITED STATES
DEPARTMENT OF
COMMERCE
PUBLICATION



NBS Voluntary Product Standard

PS 23-70

WITHDRAWN

U.S.
DEPARTMENT
OF
COMMERCE
National
Bureau
of
Standards

PRODUCT STANDARDS

Product Standards are published voluntary standards that establish (1) dimensional requirements for standard sizes and types of various products, (2) technical requirements for the product, and (3) methods of testing, grading, and marking these products. The objective is to define requirements for these products in accordance with the principal demands of the trade. *Product Standards* are published by the National Bureau of Standards of the U. S. Department of Commerce.

Development of a PRODUCT STANDARD

The Bureau's Office of Engineering Standards Services works closely with business firms, trade organizations, testing laboratories, and other appropriate groups to develop such standards. (A group interested in developing a *Product Standard* may submit a written request to the Office of Engineering Standards Services, National Bureau of Standards.) After determining that the desired standard would be technically feasible and in the public interest, a specific proposal is developed in consultation with interested trade groups and circulated for industry consideration and comment.

Subsequently, a Standard Review Committee is established to review the proposed standard for conformance with the Department of Commerce procedures. The committee includes qualified representatives of producers, distributors, and users or consumers of the product. When approved by the committee, copies of the recommended standard are distributed for consideration and acceptance. When the acceptances show general agreement by all segments of the industry, and when there is no substantive objection deemed valid by the National Bureau of Standards, the Bureau announces approval of the *Product Standard* and proceeds with its publication.

Use of a PRODUCT STANDARD

Product Standards are developed for the maximum use of industry by ensuring that producers, distributors, and users or consumers cooperate in the development of a voluntary *Product Standard*. The adoption and use of a *Product Standard* is voluntary. *Product Standards* are used most effectively in conjunction with legal instrumentalities such as building codes, purchase orders, and sales contracts. When a standard is made part of such a contract, compliance with the standard is enforceable by the buyer or the seller along with other provisions of the contract. There is no governmental regulation or control involved.

Purchasers may order products that comply with *Product Standards* and determine for themselves that their requirements are met. More often, manufacturers refer to the standards in sales catalogs, advertising, invoices, and labels on the product. Commercial inspection and testing programs are also employed for greater effectiveness together with grade labels, hallmarks and certificates. Such assurance of compliance promotes confidence and understanding between buyers and sellers.

Effective Date

Having been passed through the regular procedures of the Office of Engineering Standards Services, National Bureau of Standards, and approved by the acceptors hereinafter listed in part, this Product Standard is issued by the National Bureau of Standards, effective:

February 15, 1970
(See Section 6)

Lewis M. Branscomb
Director

HORTICULTURAL GRADE PERLITE

(This voluntary standard, initiated by the Perlite Institute, Inc., has been developed under the *Procedures for the Development of Voluntary Product Standards*, published by the Department of Commerce. See section 7, *History of Project*, for further information.)

1. PURPOSE

The purpose of this Product Standard is to establish nationally recognized grading requirements and significant quality requirements for perlite which is intended to be used for horticultural purposes. The Standard is intended thereby to provide a basis for common understanding among producers, distributors, and users of the product.

2. SCOPE

2.1. General—This Product Standard includes requirements for the grading, density, pH value, and sterility of horticultural grade perlite and gives test methods for these requirements with the exception of sterility. A provision for identifying a product as conforming to the Standard is included.

2.2. Definitions—

2.2.1. Perlite—For the purpose of this Standard, perlite is defined as a siliceous volcanic rock which may be expanded by heating.

2.2.2. Horticultural grade perlite—For the purpose of this Standard, horticultural grade perlite is defined as perlite which has been expanded by heating at a temperature above 1400 °F (760 °C) and which meets the requirements of this Standard. It is generally white in color.

3. REQUIREMENTS

3.1. General—All horticultural grade perlite represented as complying with this Standard shall meet all of the requirements listed herein. These requirements may be tightened for specific intended uses of the product when requested by the purchaser.

3.2. Grading—The grading shall conform to the grading requirements shown in table 1, when tested in accordance with 4.2.

TABLE 1. *Grading*

U. S. Standard Sieve No.	Cumulative Volume Retained percent ^a
$\frac{3}{8}$ inch	0.0 (max.)
8	20.0 (min.)
20	80.0 (min.)
100	97.0 (min.)

^a Percentage larger than designated sieve size (see 4.2).

3.3. Density—The density of the perlite shall be not less than 5.0 pounds per cubic foot (approximately 8.01 kilograms per cubic

meter) nor more than 8.0 pounds per cubic foot (approximately 12.816 kilograms per cubic meter) when tested in accordance with 4.3.

3.4. pH value—The perlite shall have a pH value of not less than 6.0 nor more than 8.0, when tested in accordance with 4.4.

3.5. Sterility—The perlite shall be sterile to the extent that it is weed and disease free. No test is deemed necessary, due to the fact that the material has been heated to 1400 °F (760 °C). However, care must be taken to insure that all of the perlite has gone through the expansion stage and that it is packaged in such a manner that it does not become contaminated during shipment and storage.

3.6. Labeling—Each package shall be labeled to indicate the volume of its contents in cubic feet.

4. TEST PROCEDURES

4.1. Test sample—The test sample shall be drawn from 6 percent of the bags in shipments under 100 bags, from 6 bags in shipments of from 100 to 599 bags, and from one bag per 100 bags in shipments of 600 bags or more. Representative portions from each bag selected shall be secured by means of a suitable sampling thief tube. The sampling tube shall be inserted the full distance between diagonally opposite corners of the bag with the bag lying in a horizontal position. The portions so obtained shall be combined to produce a composite sample having a volume of at least 1 cubic foot (approximately 0.02832 cubic meters). One composite sample shall be prepared for testing from each 2000 bags of a shipment, or fraction thereof. Samples shall be reduced by quartering or riffing to obtain portions of the proper size for individual tests.

4.2. Grading—Except that the sample size shall be 500 milliliters, the grading shall be analyzed using the apparatus, test sample selection, and procedures given in the American Society for Testing and Materials (ASTM) Designation C 136-67, *Standard Method of Test for Sieve or Screen Analysis of Fine and Course Aggregates*.¹ When a mechanical sieving device is used, the sieving time shall be 5 minutes. The percentage larger than each sieve size shall be expressed as a percentage of the sum of the volumes retained on each sieve plus the volume passing the 100 sieve (not the original sample volume).

4.3. Density—The density shall be tested in accordance with ASTM Designation C 520-65, *Standard Method of Test for Density of Granular Loose Fill Insulations*.¹

4.4. pH Value—The perlite shall be tested for pH value as follows:

The pH shall be determined by means of any reliable pH meter equipped with a standard calomel reference electrode and glass electrode. The pH meter shall be standardized with the National Bureau of Standards standard reference material or equivalent material referenced to the National Bureau of Standards standards

¹ Later issues of the ASTM publications referenced in this Standard may be used provided their requirements are equivalent to those specified in the issues designated. Copies of ASTM publications may be obtained from the American Society for Testing and Materials, 1916 Race Street, Philadelphia, Pa. 19108.

samples. The solution for testing shall be prepared by shaking 10.0 grams of the sample for 1 minute in 200 grams of warm distilled water, freshly boiled to remove carbon dioxide. The liquid to be tested shall be filtered off through Type I, Class A filter paper as covered in ASTM Designation D 1100-52, *Standard Specifications for Filter Paper for Use in Chemical Analysis*,² and cooled to 77 °F (25 °C).

5. IDENTIFICATION

5.1. Labels and literature—In order that purchasers may identify products complying with all of the requirements of this voluntary Product Standard, producers choosing to produce products in conformance with this Standard may include a statement in conjunction with their name and address on labels, invoices, sales literature, and the like. The following statement is suggested when sufficient space is available:

This horticultural grade perlite conforms to all of the requirements established in Product Standard PS23-70, developed cooperatively with the industry and published by the National Bureau of Standards under the voluntary Product Standards procedures of the U. S. Department of Commerce. Full responsibility for the conformance of this product with 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 PS23-70, (name and address of producer or distributor).

6. EFFECTIVE DATE

The effective date of a 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 (or packagers) with the requirements of a Product Standard may not actually occur until some time after the effective date. Products shall not be labeled or otherwise described as conforming to a Product Standard until such time as all applicable requirements established in the standard are met. The effective date for this Standard is February 15, 1970.

7. HISTORY OF PROJECT

In August 1966, The Perlite Institute, Inc., requested the cooperation of the Office of Engineering Standards Services in the development of a voluntary Product Standard for horticultural grade perlite. A proposed draft was submitted for consideration in November 1966.

Copies of a proposed Standard were circulated for comment to representative producers, distributors, and users of the product in June 1968. A new proposal, based on comments received in response to that circulation, was submitted to a Standard Review Committee made up of producers, distributors, and users of the product in January 1969. As a result of review of the proposal by this committee, further changes were made in the draft and it was resubmitted to the committee in May 1969. The committee approved the proposed Standard in August 1969, and the recommended Stand-

² See footnote 1, page 2.

ard was circulated to producers, distributors, users, and others interested in the product, to determine its acceptability, on November 25, 1969.

The ballots returned to the National Bureau of Standards in response to the November 25, 1969, circulation indicated a consensus of acceptability, as defined in the *Procedures for the Development of Voluntary Product Standards*, existed within the industry with regard to the Standard.

On January 26, 1970 the Standard, designated PS23-70, *Horticultural Grade Perlite* was approved for publication by the National Bureau of Standards to be effective February 15, 1970.

Technical Standards Coordinator:

J. W. Eisele, Office of Engineering Standards Services
National Bureau of Standards

8. STANDING COMMITTEE

The following individuals comprise the membership of the Standing Committee, which is to review, prior to circulation for acceptance, revisions proposed to keep the standard abreast of progress. Comment concerning the standard and suggestions for revision may be addressed to any member of the committee or to the Office of Engineering Standards Services, National Bureau of Standards, U. S. Department of Commerce, which acts as secretary for the committee.

Representing Producers and Distributors

- C. David Ruffner, Atlantic Perlite, 1919 Kenilworth Avenue, Beaver Heights, Maryland (Washington, D.C.) 20027 (Chairman)
Richard S. Funk, GREFCO, Inc., 630 Shatto Place, Los Angeles, California 90005
W. Martin Sharp, Chemrock Corporation, End of Osage Street, Nashville, Tennessee 37208
R. J. Leach, Perlite Producers, Box 253, Llano, Texas 78643
Frank K. Calkins, Lite Weight Products, Inc., Kansas City, Kansas 66101
Don Diekman, Silbrico Corporation, 6300 River Road, Hodgkins, Illinois 60525

Representing Consumers and Users

- Lawrence W. Glenn, DeKalb Nurseries Inc., 2700 DeKalb Street, P. O. Box 67, Norristown, Pennsylvania 19404
Sidney Meadows, Flowerwood Nursery Inc., Rt. No. 1, Box 130, Mobile, Alabama 36605
George S. Oki, Oki Nursery Inc., P. O. Box 7118, Sacramento, California 95826
Hendrik Verkade, Jr., Verkade's Nursery Inc., 98 Gardner Avenue, P. O. Box 336, New London, Connecticut 06320
Raymond P. Oglesby, Oglesby Nursery, 3714 S.W. 52d Avenue, Hollywood, Florida 33023
Gilbert Hall, Marshall Nurseries, 5825 West 16th Avenue, Denver, Colorado 80214

9. ACCEPTORS

The manufacturers, distributors, users, and others listed below have individually indicated in writing their acceptance of this Product Standard prior to its publication. The acceptances indicate an intention to utilize the Standard as far as practicable, but reserve the right to depart from it as may be deemed desirable. The list is published to show the extent of recorded public support for the Standard.

ASSOCIATIONS (General Support)

American Association of Nurserymen, Inc.,
Washington, D.C. 20234
Men's Garden Clubs of America Upstate
New York Region, Morrisville, New York
13408
Perlite Institute, Inc., New York, New York
10086

PRODUCERS

Atlantic Perlite Company, Washington, D.C.
20027
J. J. Brouk and Company, St. Louis, Mis-
souri 68110
Chemrock Corporation, Nashville, Tennessee
37208
The Cleveland Gypsum Division of the Cleve-
land Builders Supply Company, Cleveland,
Ohio 44113
Coralux Perlite Corporation of New Jersey,
Metuchen, New Jersey 08840
Filter-Media Company, Houston, Texas 77024
GREFCO, Inc., Los Angeles, California 90005
Johns-Manville Sales Corporation, Chicago,
Illinois 60654
Lite-Weight Products, Inc., Kansas City,
Kansas 66115
Mica Pellets, Inc., DeKalb, Illinois 60115
Northern Perlite & Vermiculite Products,
Manitoba, Canada
Perlite Industries, Inc., Midland, Texas 79701
Perlite Manufacturing Company, Carnegie,
Pennsylvania 15106
Perlite Popped Products, Santa Fe Springs,
California 90670
Perlite Producers, Inc., Liano, Texas 78648
Persolite Products, Inc., Denver, Colorado
80204
Silbrico Corporation, Hodgkins, Illinois 60525
Supreme Perlite Company, North Portland,
Oregon 97048
Texas Vermiculite Company, Dallas, Texas
75222
Whittemore Products, Inc., Roslindale, Mass-
achusetts 02131
W. R. Grace & Company, Cambridge, Massa-
chusetts 02140

USERS

Aldridge Nursery, Inc., Von Ormy, Texas
78078
Bachman's Inc., Minneapolis, Minnesota
55419
Blackwell Nurseries, Inc., Semmes, Alabama
36575
James W. Boodley, Professor of Floriculture,
Cornell University, Ithaca, New York
14850
Buckley Nursery Company, Buckley, Wash-
ington 98321
J. Thomas Camlet & Son, Clifton, New Jersey
07014
Peter Cascio Nursery, Inc., West Hartford,
Connecticut 06120
Consolidated Nurseries, Inc., Tyler, Texas
75701
Corliss Brothers, Inc., Gloucester, Massa-
chusetts 01930
Cunningham Gardens Inc., Waldron, Indiana
46132
Dale Wild Sarcocoe Nurseries, Inc., Sarcocoe,
Missouri 64862
DeKalb Nurseries, Inc., Norristown, Penn-
sylvania 19404
Doilar, Bonner and Funk, Wilmington,
Delaware 19803
Charles Fiore Nurseries, Inc., Prarie View,
Illinois 60069
Flowerwood Nursery, Inc., Mobile, Alabama
36605
Fruitland Nurseries, Augusta, Georgia 30904
Gilmore Plant & Bulb Company, Inc., Julian,
North Carolina 27283
Goochland Nurseries, Inc., Pembroke, Flor-
ida 33866
Grandview Nursery, Youngsville, Louisiana
70592
Jewell Nurseries, Inc., Lake City, Minnesota
55401
Marshall Nurseries, Denver, Colorado 80214
McKay Nursery Company, Waterloo, Wiscon-
sin 53594
Monrovia Nursery Company, Azusa, Cali-
fornia 91702
Musser Forests, Inc., Indiana, Pennsylvania
15701
Oglesby Nursery, Inc., Hollywood, Florida
33023
Oki Nursery, Sacramento, California 95826
Plumfield Nurseries, Fremont, Nebraska
68025
Potter Nurseries, Huntington, West Virginia
25702
Quagliino's Green House Products, Bristol,
Vermont 05443
L. A. Reynolds Company, Winston-Salem,
North Carolina 27101

Select Nurseries, Inc., Brea, California 92621
The Siebenthaler Company, Dayton, Ohio
45405
Skelton Greenhouses & Supplies, Princeton,
Indiana 47570
Spring Hill Nursery, Tipp City, Ohio 45371
Stock Brothers, Inc., Rockville, Maryland
20854
Ten Oaks Nursery & Gardens, Inc., Clarks-
ville, Maryland 21029

Verkade's Nursery, Inc., New London, Con-
necticut 06320
Walter Gardens, Zeeland, Michigan 49464
Westminster Nurseries, Inc., Westminster,
Maryland 21157
The Willis Nursery Company, Ottawa,
Kansas 66067
Yorman Nursery, Bartlesville, Oklahoma
74008

GENERAL INTEREST

Cannon & Mullen, Salt Lake City, Utah
84101
Harpers Nursery and Flower Shop, Inc.,
Phoenix, Arizona 85016
Milo S. Holdstein, Architect, Cleveland, Ohio
44115
Marshall Nurseries, Arlington, Nebraska
68002

Monroe, Higgins & Associates, El Paso,
Texas 79902
Pine Run Farm Supply Company, Horsham,
Pennsylvania 19044
Wank, Adams, & Slavin, New York, New
York 10017

FEDERAL GOVERNMENT

General Services, Bureau of Procurement,
Washington, D.C. 20001

Purchasing & Supply Division, Department
of Accounting & General Services, Hono-
lulu, Hawaii 96810