U. S. DEPARTMENT OF COMMERCE
HARRY L. HOPKINS, Secretary
NATIONAL BUREAU OF STANDARDS
LYMAN J. BRIGGS, Director

GROUND AND POLISHED LENSES FOR SUN GLASSES

COMMERCIAL STANDARD CS78–39

Effective Date for New Production
From October 10, 1939

A RECORDED STANDARD OF THE INDUSTRY

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PROMULGATION

of

COMMERCIAL STANDARD CS78-39

for

GROUND AND POLISHED LENSES FOR SUN GLASSES

On June 16, 1939, at the instance of the Sun Glass Institute, Inc., a general conference of representative manufacturers, distributors, and users of ground and polished lenses for sun glasses adopted a recommended commercial standard for this commodity. Those concerned have since accepted and approved for promulgation by the United States Department of Commerce, through the National Bureau of Standards, the standard as shown herein.

The standard is effective for new production from October 10, 1939.

Promulgation recommended.

I. J. Fairchild,
Chief, Division of Trade Standards.

Promulgated.

Lyman J. Briggs,
Director, National Bureau of Standards.

Promulgation approved.

Harry L. Hopkins,
Secretary of Commerce.

GROUND-AND-POLISHED LENSES FOR SUN GLASSES

COMMERCIAL STANDARD CS78-39

PURPOSE

1. The purpose of this commercial standard is to provide a nationally recognized specification for ground-and-polished sun-glass lenses to serve as an assurance and protection to purchasers, to promote fair competition between manufacturers, and to serve as a basis for certification of quality.

SCOPE

2. This commercial standard covers the accuracy of grinding and polishing as well as freedom from defects that impair serviceability of ground-and-polished sun-glass lenses. The lenses covered by this commercial standard are eye-protective (not eye-corrective) devices. They are not a substitute for prescription lenses but may be worn therewith.

TYPES

3. This specification covers ground-and-polished sun-glass lenses of curved and flat types made entirely of glass.

GENERAL REQUIREMENTS

4. The lenses shall be made from glass of a quality suitable for optical products, that is, glass free from striae, bubbles, seeds, or other defects visible to the unaided eye. Both optical surfaces of the lenses shall be ground, well polished, and free from visible surface defects, such as scratches, waves, and grayness.

5. Surfaces of lenses shall be essentially parallel or of compensated curvatures; prismatic effect shall not exceed 1/8 prism diopter.

6. Lenses shall be essentially without focal power. There shall be not more than 1/16 diopter of power in any meridian and the difference in power between any two meridians shall not exceed 1/16 diopter.

7. The lenses shall transmit not more than 67 percent of the total visible light rays from a high-powered, gas-filled tungsten lamp operated at its rated voltage.

TESTING EQUIPMENT

8. Lenses shall be tested for prismatic effect and focal power by the following method or any other recognized optical method which provides measurememts to the degree of accuracy required by these specifications:

The lens shall be tested for clearness of image of an illuminated target viewed through the lens when placed in front of a suitably calibrated telescope equipped with cross hairs and having magnifying power not less than 12 and a free aperture not less than 1 inch. The

target shall be located at a convenient distance (not less than 30 (thirty) feet), and shall consist of a cross centered within a circle. This design shall be formed of sharply delineated black lines upon a white card. The radius of the circle shall subtend an angle of 1/800th radian (1/8 prism diopter) when viewed from the position of the lens under test.

9. The visible radiation shall be determined photometrically by an observer having normal color vision, as determined by the Holmgren test for color vision, or with a physical photometer consisting of a thermophile (or other radiometer) and a luminosity solution having a spectral-transmission curve which coincides closely with the visibility curve of the average eye.

CERTIFICATION OF QUALITY

10. It is recommended that the following form of certification be used on labels, tags, invoices, etc.:

> The ---------- Company certifies these sun-glass lenses to comply with all requirements of Commercial Standard CS78–39 for Ground-and-Polished Lenses for Sun Glasses, as issued by the National Bureau of Standards.

11. An abbreviated form of certification is incorporated in the label shown as figure 1.

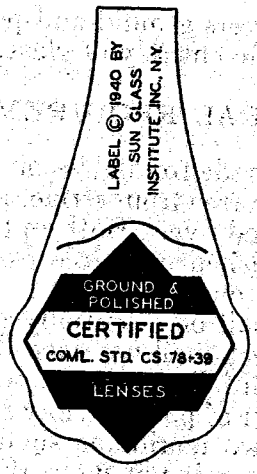

FIGURE 1.—*Enlarged reproduction (×2) of label adopted by a national association of manufacturers to certify conformance with the commercial standard.*

Colors, red and gold. On the reverse side is shown the name or trade-mark of the manufacturer or a serial number identifying the manufacturer in the records of the association.

EFFECTIVE DATE

The standard is effective for new production from October 10, 1939.

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. Each association nominated its own representatives. Comment concerning the standard, and suggestions for revision, may be addressed to any

member of the committee or to the Division of Trade Standards, National Bureau of Standards, which acts as secretary for the committee.

Manufacturers:
C. R. Essick (chairman), Pennsylvania Optical Co., Reading, Pa.
D. P. Bernheim, American Optical Co., Southbridge, Mass.
E. L. Hettinger, Willson Products, Inc., Reading, Pa.
Distributors:
Limited Price Variety Stores Association, Inc.:
Representative to be appointed.
Optical Wholesalers' National Association, Inc.:
Invited to name representative.
National Wholesale Druggists' Association:
E. L. Newcomb, 330 W. Forty-second Street, New York, N. Y.
Users:
National Conservation Bureau:
Edward R. Granniss, 60 John Street, New York, N. Y.
Philip Drinker, School of Public Health, Harvard University, 55 Shattuck Street, Boston, Mass.
M. G. Lloyd, National Bureau of Standards, Washington, D. C.
F. W. Reynolds (secretary), National Bureau of Standards, Washington, D. C.

HISTORY OF PROJECT

On May 16, 1939, the Sun Glass Institute, Inc., requested the establishment of a commercial standard for ground-and-polished lenses for sun glasses and submitted a proposed commercial standard that had been developed by a committee of that Institute. Accordingly, invitations to a general conference scheduled for June 16, 1939, at Atlantic City, N. J., were mailed to all known producer, distributor, and user organizations interested in sun-glass lenses.

This general conference reviewed the proposed commercial standard and after voting certain changes, recommended its circulation to the entire industry for approval. Minutes of the conference and the recommended commercial standard were accordingly mailed to all known interested organizations on July 10, 1939, for written acceptance. Following satisfactory acceptance, and in the absence of active opposition, the establishment of the standard was announced September 27, 1939.

ACCEPTANCE OF COMMERCIAL STANDARD

This sheet properly filled in, signed, and returned will provide for the recording of your organization as an acceptor of this commercial standard.

Date_____

Division of Trade Standards,
National Bureau of Standards,
Washington, D. C.

Gentlemen:

Having considered the statements on the reverse side of this sheet, we accept the Commercial Standard CS78–39 as our standard of practice in the

Production [1] Distribution [1] Use [1]

of ground-and-polished lenses for sun glasses.

We will assist in securing its general recognition and use, and will cooperate with the standing committee to effect revisions of the standard when necessary.

Signature of individual officer_____
(In ink)

(Kindly typewrite or print the following lines)

Name and title of above officer_____

Company_____
(Fill in exactly as it should be listed)

Street address_____

City and State_____

Out on this line

[1] Please designate which group you represent by drawing lines through the other two. Please file separate acceptances for all subsidiary companies and affiliates which should be listed separately as acceptors. In the case of related interests, trade papers, colleges, etc., desiring to record their general approval, the words "in principle" should be added after the signature.

TO THE ACCEPTOR

The following statements answer the usual questions arising in connection with the acceptance and its significance:

1. *Enforcement.*—Commercial standards are commodity specifications voluntarily established by mutual consent of those concerned. They present a common basis of understanding between the producer, distributor, and consumer and should not be confused with any plan of governmental regulation or control. The United States Department of Commerce has no regulatory power in the enforcement of their provisions, but since they represent the will of the interested groups as a whole, their provisions through usage soon become established as trade customs, and are made effective through incorporation into sales contracts by means of labels, invoices, and the like.

2. *The acceptor's responsibility.*—The purpose of commercial standards is to establish for specific commodities, nationally recognized grades or consumer criteria and the benefits therefrom will be measurable in direct proportion to their general recognition and actual use. Instances will occur when it may be necessary to deviate from the standard and the signing of an acceptance does not preclude such departures; however, such signature indicates an intention to follow the commercial standard where practicable, in the production, distribution, or consumption of the article in question.

3. *The Department's responsibility.*—The major function performed by the Department of Commerce in the voluntary establishment of commercial standards on a Nation-wide basis is fourfold: First, to act as an unbiased coordinator to bring all interested parties together for the mutually satisfactory adjustment of trade standards; second, to supply such assistance and advice as past experience with similar programs may suggest; third, to canvass and record the extent of acceptance and adherence to the standard on the part of producers, distributors, and users; and fourth, after acceptance, to publish and promulgate the standard for the information and guidance of buyers and sellers of the commodity.

4. *Announcement and promulgation.*—When the standard has been endorsed by a satisfactory majority of production or consumption in the absence of active, valid opposition, the success of the project is announced. If, however, in the opinion of the standing committee or the Department of Commerce, the support of any standard is inadequate, the right is reserved to withhold promulgation and publication.

ACCEPTORS

The organizations and individuals listed below have accepted this specification as their standard of practice in the production, distribution, and use of ground-and-polished lenses for sun glasses. Such endorsement does not signify that they may not find it necessary to deviate from the standard, nor that producers so listed guarantee all of their products in this field to conform with the requirements of this standard. Therefore specific evidence of quality certification should be obtained where required.

ASSOCIATIONS

Air Associates, Inc., Garden City, N. Y.
Bradenton Woman's Club, Bradenton, Fla. (In principle.)
Industrial Safety Equipment Association, New York, N. Y.
Limited Price Variety Stores Association, New York, N. Y.
National Retail Dry Goods Association, Merchandising Division, New York, N. Y. (In principle.)
Sun Glass Institute, Inc., New York, N. Y.

FIRMS

American Optical Co., Southbridge, Mass.
American Spectacle Co., Inc., New York, N. Y.
Bachmann Bros., Inc., Philadelphia, Pa.
Bamberger & Co., L., Newark, N. J.
Bartels Optical Co., Chicago, Ill.
Benson Optical Co., N. P., Minneapolis, Minn.
Biegel Optical Co., Denver, Colo.
Bullard Co., E. D., San Francisco, Calif.
Cannon Optical Co., Philadelphia, Pa.
Carter-Lockard Co., Los Angeles, Calif.
Central Co-operative Wholesale, Superior, Wis.
Chrysler Corporation, Detroit, Mich. (In principle.)
Cleveland Optical Co., Inc., Cleveland, Ohio.
Columbia Protektosite Co., Inc., Carlstadt, N. J.
Drinker, Philip, Boston, Mass.
Foster Grant Co., Inc., Leominster, Mass.
Hirsch & Kaye, San Francisco, Calif.
Hoffman Co., C. A., Minneapolis, Minn.
Houze Convex Glass Co., L. J., Point Marion, Pa.
Inlaid Optical Corporation, Providence, R. I.
Isbell Optical Co., The, Clinton, Iowa. (In principle.)
Keystone View Co., Meadville, Pa.
Lampert Co., Irving, Brooklyn, N. Y.
Limeburner Co., J. E., Philadelphia, Pa.
Lloyd Co., Andrew J., Boston, Mass.
Marine Optical Manufacturing Co., Boston, Mass.
May Manufacturing Co., Inc., New York, N. Y.
McIntire, Magee & Brown Co., Philadelphia, Pa.
Meyrowitz, Inc., E. B., New York, N. Y.
Milwaukee Optical Manufacturing Co., The, Milwaukee, Wis.
Mohr & Sons, R., San Francisco, Calif.
New Orleans, Inc., Better Business Bureau of, New Orleans, La. (In principle.)
Optical Products Corporation, New York, N. Y.
Pennsylvania Optical Co., Reading, Pa.
Popular Aviation Magazine, Chicago, Ill. (In principle.)
Quinton-Duffens Optical Co., Topeka, Kans.
Ridgway's, Evansville, Ind.
Roslinoid Manufacturing Co., Inc., East Boston, Mass.
Rothschild & Son, Inc., Marcus, Philadelphia, Pa.
Sacramento, Better Business Bureau of, Sacramento, Calif. (In principle.)
Safety First Supply Co., Pittsburgh, Pa.
Schmiedecke, Chas. L., Maspeth, New York, N. Y.
Sears, Roebuck & Co., Chicago, Ill.
Southern Optical Co., Louisville, Ky.
Spill Manufacturing Co., Inc., East Rutherford, N. J.
Steel City Optical Corporation, Pittsburgh, Pa.
United Lens Co., Inc., The, South bridge, Mass.
Willson Products, Inc., Reading, Pa.
Winchester Optical Co., Horseheads, N. Y.
Zeiss, Inc., Carl, New York, N. Y.
Zylo Ware Corporation, Long Island City, N. Y.

U. S. GOVERNMENT

Agriculture, Department of, Washington, D. C.
Veterans' Administration, Washington, D. C.

COMMERCIAL STANDARDS

CS No.	Item
0-39.	Commercial standards and their value to business (second edition).
1-32.	Clinical thermometers (second edition).
2-30.	Mopsticks.
3-38.	Stoddard solvent (second edition).
4-29.	Staple porcelain (all-clay) plumbing fixtures.
5-29.	Steel pipe nipples.
6-31.	Wrought-iron pipe nipples (second edition).
7-29	Standard weight malleable iron or steel screwed unions.
8-33.	Gage blanks (second edition).
9-33.	Builders' template hardware (second edition).
10-29.	Brass pipe nipples.
11-29.	Regain of mercerized cotton yarns.
12-40.	Fuel oils (fifth edition).
13-39.	Dress patterns (second edition).
14-39.	Boys' button-on waists, shirts, junior and polo shirts (made from woven fabrics) (second edition).
15-29.	Men's pajamas.
16-29.	Wall paper.
17-32.	Diamond core drill fittings (second edition).
18-29.	Hickory golf shafts.
19-32.	Foundry patterns of wood (second edition).
20-36.	Staple vitreous china plumbing fixtures (second edition).
21-39.	Interchangeable ground-glass joints, stopcocks, and stoppers (fourth edition).
22-30.	Builders' hardware (nontemplate).
23-30.	Feldspar.
24-30.	Standard screw threads.
25-30.	Special screw threads.
26-30.	Aromatic red cedar closet lining.
27-36.	Mirrors (second edition).
28-32.	Cotton fabric tents, tarpaulins, and covers.
29-31.	Staple seats for water-closet bowls.
30-31.	Colors for sanitary ware.
31-38.	Wood shingles (fourth edition).
32-31.	Cotton cloth for rubber and pyroxylin coating.
33-32.	Knit underwear (exclusive of rayon).
34-31.	Bag, case, and strap leather.
35-31.	Plywood (hardwood and eastern red cedar).
36-33.	Fourdrinier wire cloth (second edition).
37-31.	Steel bone plates and screws.
38-32.	Hospital rubber sheeting.
39-37.	Wool and part wool blankets (second edition).
40-32.	Surgeons' rubber gloves.
41-32.	Surgeons' latex gloves.
42-35.	Fiber insulating board (second edition).
43-32.	Grading of sulphonated oils.
44-32.	Apple wraps.
45-38.	Douglas fir plywood (domestic grades) (third edition).
46-36.	Hosiery lengths and sizes (second edition).
47-34.	Marking of gold-filled and rolled-gold-plate articles other than watch cases.
48-34.	Domestic burners for Pennsylvania anthracite (underfeed type).
49-34.	Chip board, laminated chip board, and miscellaneous boards for bookbinding purposes.
50-34.	Binders board for bookbinding and other purposes.
51-35.	Marking articles made of silver in combination with gold.
52-35.	Mohair pile fabrics (100-percent mohair plain velvet, 100-percent mohair plain frieze, and 50-percent mohair plain frieze).
53-35.	Colors and finishes for cast stone.
54-35.	Mattresses for hospitals.
55-35.	Mattresses for institutions.
56-36.	Oak flooring.
57-36.	Book cloths, buckrams, and impregnated fabrics for bookbinding purposes except library bindings.
58-36.	Woven elastic fabrics for use in overalls (over all elastic webbing).
59-39.	Woven dress fabrics—testing and reporting (second edition).
60-36.	Hardwood dimension lumber.
61-37.	Wood-slat venetian blinds.
62-38.	Colors for kitchen accessories.
63-38.	Colors for bathroom accessories.
64-37.	Walnut veneers.
65-38.	Wool and part-wool fabrics.
66-38.	Marking of articles made wholly or in part of platinum.
67-38.	Marking articles made of karat gold.
68-38.	Liquid hypochlorite disinfectant, deodorant, and germicide.
69-38.	Pine oil disinfectant.
70-38.	Coal tar disinfectant (emulsifying type).
71-38.	Cresylic disinfectants.
72-38.	Household insecticide (liquid spray type).
73-38.	Old growth Douglas fir standard stock doors.
74-39.	Solid hardwood wall paneling.
75-39.	Automatic mechanical draft oil burners.
76-39.	Hardwood interior trim and molding.
77-39.	Sanitary cast iron enameled ware.
78-39.	Ground-and-polished lenses for sun glasses.
79-39.	Blown, drawn, and dropped lenses for sun glasses.

NOTICE.—Those interested in commercial standards with a view toward accepting them as a basis of everyday practice may secure copies of the above standards, while the supply lasts, by addressing the Division of Trade Standards, National Bureau of Standards, Washington, D. C.