

Being Revised / Updated

United States Department of Agriculture

CONSUMER AND MARKETING SERVICE
COTTON DIVISION

CN REGULATIONS NO. 180
REVISED JULY 1, 1970

COTTON AND COTTON LINTERS STANDARDS

(Title 7, Ch. 1, Parts 27 and 28, Sections 28,201-28,603
of the Code of Federal Regulations)

CONTENTS

	Page	Page	
Summary of Cotton and Cotton Linters Standards.....	1	Official Cotton Standards of the United States for the Grade of American Pima Cotton.....	11
How to Obtain Standards.....	3	Official Cotton Linters Standards of the United States for Grade.....	12
Universal Standards for United States Upland Cotton.....	3	Official Cotton Linters Standards of the United States for Staple.....	12
Authority for Establishing, Preparing and Distributing Standards.....	4	Official Cotton Standards of the United States for Fiber Fineness and Maturity.....	13
Official Cotton Standards of the United States for Length of Staple.....	5		
Official Cotton Standards of the United States for the Grade of American Upland Cotton.....	6		

SUMMARY OF COTTON AND COTTON LINTERS STANDARDS

NOTE: The standards marked with an asterisk (*) are descriptive. The others are represented in physical form.

**Official Cotton Standards of the United States
For Length Of Staple**

(All American cottons)

Inches:	Code	Inches:	Code
*Below 13/16	24	1-3/16	38
12/16	26	1-7/32	39
7/8	28	1-1/4	40
29/32	29	*1-9/32	41
15/16	30	1-5/6	42
31/32	31	*1-11/32	43
1	32	1-3/8	44
1-1/32	33	*1-13/32	45
1-1/16	34	1-7/16	46
1-3/32	35	*1-15/32	47
1-1/8	36	1-1/2	48
1-5/32	37		

Staple standards continue upward beyond 1 1/2 inches in steps of 1/32 inch. Physical types for the lengths 1 5/16, 1 3/8, 1 7/16 and 1 1/2 inches are available for American Pima only.

Official Cotton Standards of the United States
For the Grade of American Upland Cotton--
UNIVERSAL STANDARDS

	Grade Symbol	Code No.
<u>White Cotton</u>		
*Strict Good Middling	SGM	01
Good Middling	GM	11
Strict Middling	SM	21
*Middling Plus	Mid Plus	30
Middling	Mid	31
*Strict Low Middling Plus	SLM Plus	40
Strict Low Middling	SLM	41
*Low Middling Plus	LM Plus	50
Low Middling	LM	51
*Strict Good Ordinary Plus	SGO Plus	60
Strict Good Ordinary	SGO	61
*Good Ordinary Plus	GO Plus	70
Good Ordinary	GO	71
<u>Light Spotted Cotton</u>		
*Good Middling Light Spotted	GM Lt Sp	12
*Strict Middling Light Spotted	SM Lt Sp	22
*Middling Light Spotted	Mid Lt Sp	32
*Strict Low Middling Light Spotted	SLM Lt Sp	42
*Low Middling Light Spotted	LM Lt Sp	52
<u>Spotted Cotton</u>		
*Good Middling Spotted	GM Sp	13
Strict Middling Spotted	SM Sp	23
Middling Spotted	Mid Sp	33
Strict Low Middling Spotted	SLM Sp	43
Low Middling Spotted	LM Sp	53
<u>Tinged Cotton</u>		
*Good Middling Tinged	GM Tg	14
Strict Middling Tinged	SM Tg	24
Middling Tinged	Mid Tg	34
Strict Low Middling Tinged	SLM Tg	44
Low Middling Tinged	LM Tg	54
<u>Yellow Stained Cotton</u>		
*Good Middling Yellow Stained	GM YS	15
*Strict Middling Yellow Stained	SM YS	25
*Middling Yellow Stained	Mid YS	35
<u>Light Gray Cotton</u>		
*Good Middling Light Gray	GM Lt Gray	16
*Strict Middling Light Gray	SM Lt Gray	26
*Middling Light Gray	Mid Lt Gray	36
*Strict Low Middling Light Gray	SLM Lt Gray	46
<u>Gray Cotton</u>		
*Good Middling Gray	GM Gray	17
*Strict Middling Gray	SM Gray	27
*Middling Gray	Mid Gray	37
*Strict Low Middling Gray	SLM Gray	47
<u>Below Grade</u>		
*Below Good Ordinary	BG	81
*Below Low Middling Light Spotted	BG	82

Below Grade (Cont.)	Grade Symbol	Code No.
*Below Low Middling Spotted	BG	83
*Below Low Middling Tinged	BG	84
*Below Middling Yellow Stained	BG	85
*Below Strict Low Middling Light Gray	BG	86
*Below Strict Low Middling Gray	BG	87

Official Cotton Standards Of the United States
For The Grade Of American Pima Cotton

Name	Symbol	Code No.
Grade No. 1	AP 1	10
Grade No. 2	AP 2	20
Grade No. 3	AP 3	30
Grade No. 4	AP 4	40
Grade No. 5	AP 5	50
Grade No. 6	AP 6	60
Grade No. 7	AP 7	70
Grade No. 8	AP 8	80
Grade No. 9	AP 9	90
Grade No. 10	AP 10	00

Official Cotton Linters
Standards Of The United States
For Grade

Grade 1
Grade 2
Grade 3
Grade 4
Grade 5
Grade 6
Grade 7
*Chemical Grade

Official Cotton Linters
Standards Of The United States
For Staple

Staple 1
Staple 2
Staple 3
Staple 4
Staple 5
Staple 6
Staple 7
*Below 7 Staple

HOW TO OBTAIN STANDARDS

INFORMATION CONCERNING PRICES AND APPLICATION FORMS FOR ORDERING COPIES OF THE STANDARDS REPRESENTED IN PHYSICAL FORM MAY BE OBTAINED AT THE FOLLOWING ADDRESS:

Standards Preparation and Distribution Section
Cotton Division
Agricultural Marketing Service
United States Department of Agriculture
P.O. Box 17723
Memphis, Tennessee 38117

UNIVERSAL STANDARDS FOR UNITED STATES UPLAND COTTON

The Official Cotton Standards of the United States for the Grade of American Upland Cotton are also called Universal Standards. The United States Department of Agriculture has entered into the Universal Cotton Standards Agreement with 13 cotton associations and exchanges in 10 major foreign cotton importing and consuming countries. The Agreement provides for (1) the adoption, use, and observance of the Universal Standards in the classification of United States upland cotton, (2) the arbitration or settlement of disputes

with respect to such classification, and (3) the preparation, distribution, and protection of key copies of the Universal Standards. The cotton associations and exchanges in the United States participate fully in the cotton standards work conducted pursuant to the Agreement but are not signatory members. The following cotton associations and exchanges in foreign countries are signatories to the Agreement:

Centro Algodonero Nacional--Barcelona, Spain
Bremer Baumwollbörse--Bremen, Germany
Marché de Coton de Gand--Ghent, Belgium
Association Francaise Cotonniere--Le Havre, France
Japan Spinners' Association--Osaka, Japan
Japan Cotton Traders' Association--Osaka, Japan
Osaka Sampin Exchange--Osaka, Japan
Liverpool Cotton Association, Ltd.--Liverpool, England
The British Textile Employers' Association--Manchester, England
Associazione Contoniera Italiana--Milan, Italy
De Vereeniging Voor den Katoenhandel--Rotterdam, The Netherlands
East India Cotton Association--Bombay, India
Gdynia Cotton Association--Gdynia, Poland

AUTHORITY FOR ESTABLISHING, PREPARING AND DISTRIBUTING STANDARDS

The basic authority for establishing preparing, and distributing standards for cotton and cotton linters is contained in the United States Cotton Standards Act.

The provisions for standards in this law are shown below:

United States Cotton Standards Act, as Amended

* * * *

7 U.S.C. 56. Establishment of cotton standards; furnishing copies of established standards sold.

The Secretary of Agriculture is authorized to establish from time to time standards for the classification of cotton by which its quality or value may be judged or determined for commercial purposes, which shall be known as the official cotton standards of the United States. Any such standard or change or replacement thereof shall become effective only on and after a date specified in the order of the Secretary of Agriculture establishing the same, which date shall be not less than one year after the date of such order: Provided, That the official cotton standards established, effective August 1, 1923, under the United States Cotton Futures Act shall be at the same time the official cotton standards for the purpose of this chapter unless and until changed or replaced under this chapter. Whenever any standard or change or replacement thereof shall become effective under this chapter, it shall also, when so specified in the order of the Secretary of Agriculture, become effective for the purposes of the United States Cotton Futures Act and supersede any inconsistent standard established under said Act. Whenever the official cotton standards of the United States established under this chapter shall be represented by practical forms, the Department of Agriculture shall furnish copies thereof, upon request, to any person, and the cost thereof, as determined by the Secretary of Agriculture, shall be paid by the person

making the request. The Secretary of Agriculture may cause such copies to be certified under the seal of the Department of Agriculture and may attach such conditions to the purchase and use thereof, including provision for the inspection, condemnation, and exchange thereof by duly authorized representatives of the Department of Agriculture, as he may find to be necessary to the proper application of the official cotton standards of the United States.

7 U.S.C. 61. General regulations, investigations, tests, etc., by Secretary

For the purposes of this chapter the Secretary of Agriculture shall cause to be promulgated such regulations, may cause such investigations, tests, demonstrations, and publications to be made, including the investigation and determination of some practical method whereby repeated and unnecessary sampling and classification of cotton may be avoided, and may cooperate with any department or agency of the Government, any State, Territory, District, or possession, or department, agency, or political subdivision thereof, or any person as he shall find to be necessary.

* * * *

OFFICIAL COTTON STANDARDS OF THE UNITED STATES FOR LENGTH OF STAPLE

Sec. 28.301 Measurement; humidity; temperature. The length of staple of any cotton shall be the normal length by measurement, without regard to quality or value, of a typical portion of its fibers under a relative humidity of the atmosphere of 65 percent and a temperature of 70° F.

Sec. 28.302 Terms of designation. The length of staple of any cotton shall be designated by that one of the following terms which expresses its measurement in inches and fractions of an inch in accordance with sec. 28.301:

"Below 13/16; 13/16; 7/8; 29/32; 15/16; 31/32; 1; 1-1/32; 1-1/16; 1-3/32; 1-1/8; 1-5/32; 1-3/16; 1-7/32; 1-1/4; 1-9/32; 1-5/16; 1-11/32; 1-3/8; 1-13/32; 1-7/16; 1-15/32; 1-1/2; 1-17/32; 1-9/16; 1-19/32; 1-5/8; 1-21/32; 1-11/16; 1-23/32; 1-3/4; and upward in like manner in gradations of thirty-seconds, disregarding any fraction less than a thirty-second."

Sec. 28.303 Original representations of staple lengths. The following lengths of staple are each represented by a quantity of cotton in the custody of the United States Department of Agriculture suitably contained and marked "Original Representation of official cotton standards of the United States" followed in each instance by name of growth, the appropriate designation of staple length, and the effective date:

(a) American Upland. 7/8, 15/16, 1, 1-1/32, 1-1/16, 1-3/32, 1-1/8, 1-5/32, 1-3/16, 1-7/32 and 1-1/4 inches (effective date, August 1, 1929); 13/16, 29/32 and 31/32 inches (effective date, August 1, 1933).

(b) American Pima. 1-5/16 (effective date, August 1, 1961); 1-3/8 and 1-7/16 inches (effective date, August 10, 1943); 1-1/2 inches (effective date, August 1, 1929).

(c) Sea Island. 1-1/2, 1-9/16, 1-5/8 and 1-3/4 inches effective date, August 10, 1939).

Sec. 28.304 Over 13/16 inch staple. Cotton which is more than thirteen-sixteenths of an inch in length of staple, but is not exactly one of the measurements specified in sec. 28.302, shall be designated by that one of such measurements which comes nearest under its true measurement.

Sec. 28.305 Bale of different staple lengths. Whenever the length of staple of cotton taken from one part of a bale is different from another part of the same bale, the length of staple of the cotton in such bale shall be that of the part which is the shorter.

OFFICIAL COTTON STANDARDS OF THE UNITED STATES FOR THE GRADE OF
AMERICAN UPLAND COTTON

WHITE COTTON

Sec. 28.401 Strict Good Middling. Strict Good Middling is American upland cotton which in color, leaf, and preparation is better than Good Middling.

Sec. 28.402 Good Middling. Good Middling is American upland cotton which in color, leaf, and preparation is within the range represented by a set of samples in the custody of the United States Department of Agriculture in the District of Columbia in a container marked "Original Official Cotton Standards of the United States, American Upland, Good Middling, effective June 15, 1963."

Sec. 28.403 Strict Middling. Strict Middling is American upland cotton which in color, leaf, and preparation is within the range represented by a set of samples in the custody of the United States Department of Agriculture in the District of Columbia in a container marked "Original Official Cotton Standards of the United States, American Upland, Strict Middling effective June 15, 1963."

Sec. 28.404 Middling Plus. Middling Plus is American upland cotton which is Middling in leaf and preparation with Strict Middling color.

Sec. 28.405 Middling. Middling is American upland cotton which in color, leaf, and preparation is within the range represented by a set of samples in the custody of the United States Department of Agriculture in the District of Columbia in a container marked "Original Official Cotton Standards of the United States, American Upland, Middling, effective June 15, 1963."

Sec. 28.406 Strict Low Middling Plus. Strict Low Middling Plus is American upland cotton which is Strict Low Middling in leaf and preparation with Middling color.

Sec. 28.407 Strict Low Middling. Strict Low Middling is American upland cotton which in color, leaf, and preparation is within the range represented by a set of samples in the custody of the United States Department of Agriculture in the District of Columbia in a container marked "Original Official Cotton Standards of the United States, American Upland, Strict Low Middling, effective June 15, 1963."

Sec. 28.408 Low Middling Plus. Low Middling Plus is American upland cotton which is Low Middling in leaf and preparation with Strict Low Middling color.

Sec. 28.409 Low Middling. Low Middling is American upland cotton which in color, leaf, and preparation is within the range represented by a set of samples in the custody of the United States Department of Agriculture in the District of Columbia in a container marked "Original Official Cotton Standards of the United States, American Upland, Low Middling, effective June 15, 1963."

Sec. 28.410 Strict Good Ordinary Plus. Strict Good Ordinary Plus is American upland cotton which is Strict Good Ordinary in leaf and preparation with Low Middling color.

Sec. 28.411 Strict Good Ordinary. Strict Good Ordinary is American upland cotton which in color, leaf, and preparation is within the range represented by a set of samples in the custody of the United States Department of Agriculture in the District of Columbia in a container marked "Original Official Cotton Standards of the United States, American Upland, Strict Good Ordinary, effective June 15, 1963."

Sec. 28.412 Good Ordinary Plus. Good Ordinary Plus is American upland cotton which is Good Ordinary in leaf and preparation with Strict Good Ordinary color.

Sec. 28.413 Good Ordinary. Good Ordinary is American upland cotton which in color, leaf, and preparation is within the range represented by a set of samples in the custody of the United States Department of Agriculture in the District of Columbia in a container marked "Original Official Cotton Standards of the United States, American Upland, Good Ordinary, effective June 15, 1963."

LIGHT SPOTTED COTTON

Sec. 28.420 Good Middling Light Spotted. Good Middling Light Spotted is American upland cotton which in leaf and preparation is Good Middling, but which is spot or color, or both, is between Good Middling and Good Middling Spotted.

Sec. 28.421 Strict Middling Light Spotted. Strict Middling Light Spotted is American upland cotton which in leaf and preparation is Strict Middling, but which in spot or color, or both, is between Strict Middling and Strict Middling Spotted.

Sec. 28.422 Middling Light Spotted. Middling Light Spotted is American upland cotton which in leaf and preparation is Middling, but which in spot or color, or both, is between Middling and Middling Spotted.

Sec. 28.423 Strict Low Middling Light Spotted. Strict Low Middling Light Spotted is American upland cotton which in leaf and preparation is Strict Low Middling, but which in spot or color, or both, is between Strict Low Middling and Strict Low Middling Spotted.

Sec. 28.424 Low Middling Light Spotted. Low Middling Light Spotted is American upland cotton which in leaf and preparation is Low Middling, but which in spot or color, or both, is between Low Middling and Low Middling Spotted.

SPOTTED COTTON

Sec. 28.430 Good Middling Spotted. Good Middling Spotted is American upland cotton which in color, leaf, and preparation is better than Strict Middling Spotted.

Sec. 28.431 Strict Middling Spotted. Strict Middling Spotted is American upland cotton which in color, leaf, and preparation is within the range represented by a set of samples in the custody of the United States Department of Agriculture in the District of Columbia in a container marked "Original Official Cotton Standards of the United States, American Upland, Strict Middling Spotted, effective June 15, 1963."

Sec. 28.432 Middling Spotted. Middling Spotted is American upland cotton which in color, leaf, and preparation is within the range represented by a set of samples in the custody of the United States Department of Agriculture in the District of Columbia in a container marked "Original Official Cotton Standards of the United States, American Upland, Middling Spotted, effective June 15, 1963."

Sec. 28.433 Strict Low Middling Spotted. Strict Low Middling Spotted is American upland cotton which in color, leaf, and preparation is within the range represented by a set of samples in the custody of the United States Department of Agriculture in the District of Columbia in a container marked "Original Official Cotton Standards of the United States, American Upland, Strict Low Middling Spotted, effective June 15, 1963."

Sec. 28.434 Low Middling Spotted. Low Middling Spotted is American upland cotton which in color, leaf, and preparation is within the range represented by a set of samples in the custody of the United States Department of Agriculture in the District of Columbia in a container marked "Original Official Cotton Standards of the United States American Upland, Low Middling Spotted, effective June 15, 1963."

TINGED COTTON

Sec. 28.440 Good Middling Tinged. Good Middling Tinged is American upland cotton which is color, leaf, and preparation is better than Strict Middling Tinged.

Sec. 28.441 Strict Middling Tinged. Strict Middling Tinged is American upland cotton which in color, leaf, and preparation is within the range represented by a set of samples in the custody of the United States Department of Agriculture in the District of Columbia in a container marked "Original Official Cotton Standards of the United States, American Upland, Strict Middling Tinged, effective June 15, 1963."

Sec. 28.442 Middling Tinged. Middling Tinged is American upland cotton which in color, leaf, and preparation is within the range represented by a set of samples in the custody of the United States Department of Agriculture in the District of Columbia in a container marked "Original Official Cotton Standards of the United States, American Upland, Middling Tinged, effective June 15, 1963."

Sec. 28.443 Strict Low Middling Tinged. Strict Low Middling Tinged is American upland cotton which in color, leaf, and preparation is within the range represented by a set of samples in the custody of the United States Department of Agriculture in the District of Columbia in a container marked "Original Official Cotton Standards of the United States, American Upland, Strict Low Middling Tinged, effective June 15, 1963."

Sec. 28.444 Low Middling Tinged. Low Middling Tinged is American upland cotton which in color, leaf, and preparation is within the range represented by a set of samples in the custody of the United States Department of Agriculture in the District of Columbia in a container marked "Original Official Cotton Standards of the United States, American Upland, Low Middling Tinged effective June 15, 1963."

YELLOW STAINED COTTON

Sec. 28.450 Good Middling Yellow Stained. Good Middling Yellow Stained is American upland cotton which in leaf and preparation is Good Middling Tinged, but which in color is deeper than Good Middling Tinged.

Sec. 28.451 Strict Middling Yellow Stained. Strict Middling Yellow Stained is American upland cotton which in leaf and preparation is Strict Middling Tinged, but which in color is deeper than Strict Middling Tinged.

Sec. 28.452 Middling Yellow Stained. Middling Yellow Stained is American upland cotton which in leaf and preparation is Middling Tinged, but which in color is deeper than Middling Tinged.

LIGHT GRAY COTTON

Sec. 28.460 Good Middling Light Gray. Good Middling Light Gray is American upland cotton which in color is Middling and which in leaf and preparation is Good Middling.

Sec. 28.461 Strict Middling Light Gray. Strict Middling Light Gray is American upland cotton which in color is Strict Low Middling and which in leaf and preparation is Strict Middling.

Sec. 28.462 Middling Light Gray. Middling Light Gray is American upland cotton which in color is Low Middling and which in leaf and preparation is Middling.

Sec. 28.463 Strict Low Middling Light Gray. Strict Low Middling Light Gray is American upland cotton which in color is Strict Good Ordinary and which in leaf and preparation is Strict Low Middling.

GRAY COTTON

Sec. 28.470 Good Middling Gray. Good Middling Gray is American upland cotton which in color is Strict Low Middling and which in leaf and preparation is Good Middling or better.

Sec. 28.471 Strict Middling Gray. Strict Middling Gray is American upland cotton which in color is Low Middling and which in leaf and preparation is Strict Middling or better.

Sec. 28.472 Middling Gray. Middling Gray is American upland cotton which in color is Strict Good Ordinary and which in leaf and preparation is Middling or better.

Sec. 28.473 Strict Low Middling Gray. Strict Low Middling Gray is American upland cotton which in color is Good Ordinary and which in leaf and preparation is Strict Low Middling or better.

BELOW GRADE COTTON

Sec. 28.475 Below Grade Cotton. Below Grade cotton is American upland cotton which is lower in grade than Good Ordinary, or Low Middling Light Spotted, or Low Middling Spotted, or Low Middling Tinged, or Middling Yellow Stained, or Strict Low Middling Gray. In cotton classification, the official designation for such cotton is Below Grade. The term Below Good Ordinary, or Below Low Middling Light Spotted, or Below Low Middling Spotted, or Below Low Middling Tinged, or Below Middling Yellow Stained, or Below Strict Low Middling Gray and other additional explanatory terms considered necessary to describe adequately the condition of the cotton may be entered on classification memorandums or certificates.

GENERAL

Sec. 28.480 General. American upland cotton which in color, leaf, and preparation is within the range of the standards established in this part, but which contains a combination of color, leaf, and preparation not within any one of the standards set out in this part, shall be designated according to the standard which is equivalent to, or if there be no exact equivalent is next below, the average of all the factors that determine the grade of the cotton: Provided, That in no event shall the grade assigned to any cotton or sample be more than one grade higher than the grade classification of the color or leaf contained therein.

Sec. 28.481 Alternate title for standards. Since these standards have been agreed upon and accepted by the leading European cotton associations and exchanges, they may also be termed and referred to as the "Universal Standards for American Cotton."

OFFICIAL COTTON STANDARDS OF THE UNITED STATES FOR THE GRADE OF AMERICAN PIMA COTTON

Sec. 28.501 Grade No. 1. Grade No. 1 shall be American Pima cotton which in grade is within the range represented by a set of samples in the custody of the United States Department of Agriculture in the District of Columbia in a container marked "Original Official Cotton Standards of the United States, American Pima Grade No. 1, effective July 1, 1970."

Sec. 28.502 Grade No. 2. Grade No. 2 shall be American Pima cotton which in grade is within the range represented by a set of samples in the custody of the United States Department of Agriculture in the District of Columbia in a container marked "Original Official Cotton Standards of the United States, American Pima Grade No. 2, effective July 1, 1970."

Sec. 28.503 Grade No. 3. Grade No. 3 shall be American Pima cotton which in grade is within the range represented by a set of samples in the custody of the United States Department of Agriculture in the District of Columbia in a container marked "Original Official Cotton Standards of the United States, American Pima Grade No. 3, effective July 1, 1970."

Sec. 28.504 Grade No. 4. Grade No. 4 shall be American Pima cotton which in grade is within the range represented by a set of samples in the custody of the United States Department of Agriculture in the District of Columbia in a container marked "Original Official Cotton Standards of the United States, American Pima Grade No. 4, effective July 1, 1970."

Sec. 28.505 Grade No. 5. Grade No. 5 shall be American Pima cotton which in grade is within the range represented by a set of samples in the custody of the United States Department of Agriculture in the District of Columbia in a container marked "Original Official Cotton Standards of the United States, American Pima Grade No. 5, effective July 1, 1970."

Sec. 28.506 Grade No. 6. Grade No. 6 shall be American Pima cotton which in grade is within the range represented by a set of samples in the custody of the United States Department of Agriculture in the District of Columbia in a container marked "Original Official Cotton Standards of the United States, American Pima Grade No. 6, effective July 1, 1970."

Sec. 28.507 Grade No. 7. Grade No. 7 shall be American Pima cotton which in grade is within the range represented by a set of samples in the custody of the United States Department of Agriculture in the District of Columbia in a container marked "Original Official Cotton Standards of the United States, American Pima Grade No. 7, effective July 1, 1970."

Sec. 28.508 Grade No. 8. Grade No. 8 shall be American Pima cotton which in grade is within the range represented by a set of samples in the custody of the United States Department of Agriculture in the District of Columbia in a container marked "Original Official Cotton Standards of the United States, American Pima Grade No. 8, effective July 1, 1970."

Sec. 28.509 Grade No. 9. Grade No. 9 shall be American Pima cotton which in grade is within the range represented by a set of samples in the custody of the United States Department of Agriculture in the District of Columbia in a container marked "Original Official Cotton Standards of the United States, American Pima, Grade No. 9, effective July 1, 1970."

Sec. 28.510 Grade No. 10. American Pima cotton which in grade is inferior to Grade No. 9 shall be designated as "Grade No. 10."

OFFICIAL COTTON LINTERS STANDARDS OF THE UNITED STATES FOR GRADE

Sec. 28.201 Grade 1. Grade 1 shall be United States cotton linters which in grade is within the range represented by a set of samples in the custody of the United States Department of Agriculture in a container marked "Original Official Cotton Linters Standard of the United States, Grade 1, effective July 1, 1956."

Sec. 28.202 Grade 2. Grade 2 shall be United States cotton linters which in grade is within the range represented by a set of samples in the custody of the United States Department of Agriculture in a container marked "Original Official Cotton Linters Standard of the United States, Grade 2, effective July 1, 1956."

Sec. 28.203 Grade 3. Grade 3 shall be United States cotton linters which in grade is within the range represented by a set of samples in the custody of the United States Department of Agriculture in a container marked "Original Official Cotton Linters Standard of the United States, Grade 3, effective July 1, 1956."

Sec. 28.204 Grade 4. Grade 4 shall be United States cotton linters which in grade is within the range represented by a set of samples in the custody of the United States Department of Agriculture in a container marked "Original Official Cotton Linters Standard of the United States, Grade 4, effective July 1, 1956."

Sec. 28.205 Grade 5. Grade 5 shall be United States cotton linters which in grade is within the range represented by a set of samples in the custody of the United States Department of Agriculture in a container marked "Original Official Cotton Linters Standard of the United States, Grade 5, effective July 1, 1956."

Sec. 28.206 Grade 6. Grade 6 shall be United States cotton linters which in grade is within the range represented by a set of samples in the custody of the United States Department of Agriculture in a container marked "Original Official Cotton Linters Standard of the United States, Grade 6, effective July 1, 1956."

Sec. 28.207 Grade 7. Grade 7 shall be United States cotton linters which in grade is within the range represented by a set of samples in the custody of the United States Department of Agriculture in a container marked "Original Official Cotton Linters Standard of the United States, Grade 7, effective July 1, 1956."

Sec. 28.208 Chemical Grade. United States cotton linters which in grade are below Grade 7 shall be designated as "Chemical Grade."

OFFICIAL COTTON LINTERS STANDARDS OF UNITED STATES FOR STAPLE

Sec. 28.215 Staple 1. Staple 1 shall be United States cotton linters which in staple is within the range represented by a quantity of cotton linters in the custody of the United States Department of Agriculture marked "Original Official Cotton Linters Standard of the United States, Staple 1, effective July 1, 1957."

Sec. 28.216 Staple 2. Staple 2 shall be United States cotton linters which in staple is within the range represented by a quantity of cotton linters in the custody of the United States Department of Agriculture marked "Original Official Cotton Linters Standard of the United States, Staple 2, effective July 1, 1957."

Sec. 28.217 Staple 3. Staple 3 shall be United States cotton linters which in staple is within the range represented by a quantity of cotton linters in the custody of the United States Department of Agriculture marked "Original Official Cotton Linters Standard of the United States, Staple 3, effective July 1, 1957."

Sec. 28.218 Staple 4. Staple 4 shall be United States cotton linters which in staple is within the range represented by a quantity of cotton linters in the custody of the United States Department of Agriculture marked "Original Official Cotton Linters Standard of the United States, Staple 4, effective July 1, 1957."

Sec. 28.219 Staple 5. Staple 5 shall be United States cotton linters which in staple is within the range represented by a quantity of cotton linters in the custody of the United States Department of Agriculture marked "Original Official Cotton Linters Standard of the United States, Staple 5, effective July 1, 1957."

Sec. 28.220 Staple 6. Staple 6 shall be United States cotton linters which in staple is within the range represented by a quantity of cotton linters in the custody of the United States Department of Agriculture marked "Original Official Cotton Linters Standard of the United States, Staple 6, effective July 1, 1957."

Sec. 28.221 Staple 7. Staple 7 shall be United States cotton linters which in staple is within the range represented by a quantity of cotton linters in the custody of the United States Department of Agriculture marked "Original Official Cotton Linters Standard of the United States, Staple 7, effective July 1, 1957."

Sec. 28.222 Below 7 Staple. Cotton linters which in staple is below staple 7 will be designated as "Below 7" staple.

OFFICIAL COTTON STANDARDS OF THE UNITED STATES FOR FIBER FINENESS AND MATURITY

Sec. 28.601 Official cotton standards for fiber fineness and maturity. The official cotton standards of the United States for fiber fineness and maturity shall be the measure of such qualities, in combination, provided by air flow instrument tests in terms of micronaire readings in accordance with the procedure specified in Sec. 28.603.

Sec. 28.602 Terms of designations. The fiber fineness and maturity of any cotton shall be designated by the micronaire reading obtained from an air flow instrument test for a specimen of the cotton as determined under Sec. 28.603, e.g., 4.1, 4.2, 4.3, etc. To simplify recording, the decimal point may be omitted, and the micronaire reading recorded as 41, 42, 43, etc.

Sec. 28.603 Procedure for air flow tests of micronaire reading. In determining in terms of micronaire readings, the fiber fineness and maturity, in combination, of cotton, the following procedures shall apply:

(a) Facilities and equipment shall include:

(1) Air flow instrument complete with accessories to measure the fineness and maturity, in combination, of cotton in terms of micronaire reading on the curvilinear scale adopted in September 1950 by the Department of Agriculture, or its equivalent.

(2) A suitable supply of compressed air filtered to remove moisture and other impurities.

(3) Balance or scales suitable for accurately weighing the specimens required for the particular instrument.

(4) International Calibration Cotton Standards with established micronaire reading values for calibration of the air flow instrument.

(b) The instrument shall be calibrated each day before routine testing begins, as follows:

(1) The air shall be allowed to flow through the instrument until the indicator stabilizes.

(2) Specimens from at least two of the calibration cottons shall be tested to insure proper calibration of the instrument. The instrument shall be considered in calibration if the values obtained on the test specimens agree with the established values of the calibration cottons within 0.1 micronaire reading.

(c) Testing of the cotton specimen shall be performed as follows:

(1) Approximately the same amount of cotton shall be taken from each side of the sample for a test specimen. The weight of the test specimen shall be that weight prescribed for the air flow instrument being used.

(2) The weighed specimen shall be tested in a properly calibrated instrument.

(3) The specimen shall be inserted into the specimen holder of the instrument so that the mass of fibers is well distributed within the specimen holder.

(4) The air shall then be allowed to flow through the specimen in accordance with the method of operation of the instrument.

(5) The position of the instrument indicator shall be determined to the nearest 0.1 micronaire reading when it becomes stable.

(d) The accuracy of the instrument shall be checked at least every 2 hours during operation by testing appropriate calibration cottons. If the value obtained on a specimen from the calibration cotton is outside the established limits of 0.1 micronaire reading, or when successive readings show the results to be within the established limits, but consistently high or low, the instrument and technique shall be thoroughly checked to remedy the discrepancies. Additional tests using calibration cottons shall be made until acceptable results are obtained before routing testing is resumed.