

FFF-C-641D  
April 17, 1975  
~~SUPERSEDING~~  
FFF-C-641C  
October 22, 1964

## FEDERAL SPECIFICATION

### SHAVING SOAP AND SHAVING CREAM

This specification was approved by the Commissioner, Federal Supply Service, General Services Administration, for the use of all Federal agencies.

#### 1. SCOPE AND CLASSIFICATION

1.1 Scope. This specification covers shaving soap and shaving cream.

1.2 Classification. Shaving soap and shaving cream shall be of the following types, classes, and sizes as specified (see 6.2 and 6.3).

Type I - Shaving soap.  
Type II - Shaving cream.

Class 1 - Lather.  
Class 2 - Brushless.

Sizes - 2 ounces avoirdupois (oz av)  
2.67 oz av  
4.5 - 5.0 oz av

#### 2. APPLICABLE DOCUMENTS

2.1 The following documents, of the issues in effect on date of invitation for bids or request for proposal, form a part of this specification to the extent specified herein.

##### Federal Specifications

PPP-B-566 - Boxes, Folding, Paperboard.  
PPP-B-636 - Boxes, Shipping, Fiberboard.  
PPP-B-676 - Boxes, Set-Up.  
PPP-C-186 - Containers; Packaging and Packing for Drugs, Chemicals, and Pharmaceuticals.

##### Federal Standards:

Fed. Std. No. 123 - Marking for Domestic Shipment (Civil Agencies).  
Fed. Std. No. 595 - Colors.

(Activities outside the Federal Government may obtain copies of Federal Specifications, Standards, and Handbooks as outlined under General Information in the Index of Federal Specifications and Standards and at the prices indicated in the Index. The Index, which includes cumulative monthly supplements as issued, is for sale on a subscription basis by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

(Single copies of this specification and other Federal Specifications required by activities outside the Federal Government for bidding purposes are available without charge from Business Service Centers at the General Services Administration Regional Offices in Boston, New York, Washington, DC, Atlanta, Chicago, Kansas City, MO, Fort Worth, Denver, San Francisco, Los Angeles, and Seattle, WA.

FFF-C-641D

(Federal Government activities may obtain copies of Federal Specifications, Standards, and Handbooks and the Index of Federal Specifications and Standards from established distribution points in their agencies.)

#### Military Standards

MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes.  
MIL-STD-129 - Marking for Shipment and Storage.

(Copies of Military Specifications and Standards required by suppliers in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer.)

2.2 Other publications. The following documents form a part of this specification to the extent specified herein. Unless a specific issue is identified, the issue in effect on date of invitation for bids or request for proposal shall apply.

#### American Society for Testing and Materials (ASTM) Standard

D 460 - Sampling and Chemical Analysis of Soaps and Soap Products.

(Application for copies should be addressed to the American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.)

#### National Motor Freight Traffic Association, Inc., Agent

National Motor Freight Classification.

(Application for copies should be addressed to the American Trucking Associations, Inc., Tariff Order Section, 1616 P Street, NW, Washington, DC 20036.)

#### Uniform Classification Committee, Agent

Uniform Freight Classification.

(Application for copies should be addressed to the Uniform Classification Committee, Room 1106, 222 South Riverside Plaza, Chicago, IL 60606.)

### 3. REQUIREMENTS

3.1 Materials. Soaps in type I shaving soap and type II, class 1 shaving cream shall be sodium-potassium soaps made from stearic acid and coconut oil. Tallow may also be used. The finished product shall be suitable for use on the human skin and shall conform to the requirements of table I.

TABLE I. Physical and chemical requirements

Property	Type I		Type II			
	Class 1		Class 1		Class 2	
	min.	max.	min.	max.	min.	max.
Matter volatile at 105° C. (percent)	--	10				
Moisture (type II) (percent)			--	50	--	75
Free alkali (as KOH, percent)	--	0	--	0	--	0
Free acid (as stearic acid, percent)	--	1.0	--	6.5	15	--
Matter insoluble in alcohol (percent)	--	0.8	--	0.3		
Matter insoluble in water (percent)	--	0.4	--	0.3		
Anhydrous soap (percent)	87	--	40	--		
Titer (degrees C.)	40	--	40	--		
Acid number of mixed fatty acids from soap (mg KOH/g fatty acid)	210	--	210	--		

FFF-C-641D

3.2 Performance. The shaving soap and shaving creams shall perform satisfactorily and shall not cause irritation to the skin either during or after shaving when tested as specified in 4.3.1.

3.3 Lather. The lather produced by type I shaving soap and type II, class 1 shaving cream shall be thick and creamy. The lather shall be of good stability so that it remains moist on the face throughout the shave.

3.4 Odor. The shaving soap and shaving creams shall have a mild and pleasant odor.

3.5 Form.

3.5.1 Type I shaving soap shall be cake form. Cakes shall be firm, clean, and homogeneous.

3.5.2 Type II shaving creams shall be cream form. Creams shall be smooth, homogeneous, and free from grit when tested as specified in 4.3.2.

3.6 Consistency. The lather of type I shaving soap and type II, class 1 shaving cream shall be of such consistency that it can be applied easily and spread over the skin smoothly. Type II, class 2 shaving cream shall spread over the skin easily at ambient temperatures between 15° C. and 32° C.

3.7 Cake weight and color. Type I cakes shall be white in color and uniform in weight. This weight shall be in the range 1.75 to 2.25 ounces avoirdupois.

3.8 Tubes. Type II shaving creams shall be packaged in collapsible tubes conforming to PPP-C-186, group B, class 1 or class 2, type A, closure A, B, C, or H.

3.9 Shelf life. Type II shaving creams, packaged as specified in 3.8, shall not become discolored, turn rancid, damage or be damaged by the tube, or separate into components during storage under general warehouse conditions at temperatures between 32° F. and 110° F. for a period of 18 months from time of first receipt by the Government. The manufacturer shall certify that his product meets this requirement.

#### 4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the supplier is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified in the contract or order, the supplier may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure that supplies and services conform to prescribed requirements.

4.1.1 Certificates of compliance. Where certificates of compliance are submitted, the Government reserves the right to check test such items to determine the validity of the certification.

#### 4.2 Quality conformance inspection.

4.2.1 Inspection of the end item. In accordance with 4.1 above, components and materials shall be inspected and tested in accordance with all the requirements of referenced specifications, drawings, and standards unless otherwise excluded, amended, modified, or qualified in this specification or applicable purchase documents.

4.2.2 Examination of preparation for delivery. Packaging, packing and marking shall be examined to determine compliance with the requirements of section 5. Defects shall be scored as in table II. The sample unit shall be one shipping container fully prepared for delivery. The lot shall consist of all shipping containers presented for delivery at one time. Sampling and acceptance shall be in accordance with MIL-STD-105, inspection level S-2, acceptable quality level (AQL) of 4.0 percent defective.

FFF-C-641D

TABLE II. Examination of preparation for delivery

Examine	Defect
Containers	Not as specified.
Contents	Not as specified.
Marking	Omitted; incorrect; illegible, improper size, location, sequence or method of application.
Materials	Component missing or damaged.
Workmanship	Bulging or distortion of containers.

4.2.2.1 Examination of closure, waterproofing, and banding of containers. When shipping containers are required to comply with PPP-B-636, examination for defects in closure, waterproofing, and banding shall be in accordance with the appendix to that specification.

4.2.3 Examination of the end item. The end item shall be examined for defects as specified in table III. The sample unit shall be one cake of shaving soap or one tube of shaving cream. The lot shall consist of all shaving soap or shaving cream manufactured during one 24-hour period, from the same raw material lots, under the same processing conditions and offered for delivery at one time. Sampling and acceptance shall be in accordance with MIL-STD-105, inspection level S-2, AQL of 4.0 percent defective.

TABLE III. Examination of the end item

Examine	Defect
Odor	Rancid, unpleasant, not mild.
Color (type I)	Darker than color No 37855 of Fed Std No 595 (fresh cut surface)
Net weight	Less than specified.
Workmanship	Not clean; not uniform, any foreign matter, not homogeneous soap cakes crumbly.
Tubes	Not as specified.

4.2.4 Testing of the end item. The end item shall be tested as specified in table IV. The sample unit shall be one cake of shaving soap or one tube of shaving cream. The lot shall consist of all shaving soap or shaving cream manufactured during one 24-hour period, from the same raw material lots, under the same processing conditions and which is offered for delivery at one time. Sampling shall be in accordance with MIL-STD-105, inspection level S-1. Perform each test twice. Report individual values and average value for chemical analyses. Failure of any sample unit to pass any of the specified tests shall be cause for rejection of the lot.

TABLE IV. Instructions for testing the end item

Characteristic	Specification		Results reported
	Requirement	Test method	Pass or fail/Numerically to nearest
Matter volatile at 105° C.	3.1	ASTM D 460 #11	0.1 percent
Moisture (distillation method).	3.1	ASTM D 460 #12-15	0.1 percent
Matter insoluble in alcohol.	3.1	ASTM D 460 #16,17	0.1 percent
Free acid, calculated as stearic acid.	3.1	ASTM D 460 #18	0.1 percent
Matter insoluble in water.	3.1	ASTM D 460 #19	0.1 percent
Anhydrous soap, calculated as potash soap.	3.1	ASTM D 460 #21,22	0.1 percent
Free alkali, as KOH.	3.1	ASTM D 460 #18	0.001 percent
Titer.	3.1	ASTM D 460 #43,44	0.5° C.
Acid number.	3.1	ASTM D 460 #45,46	0.5 mg KOH/g fatty acid
Performance.	3.2	4.3.1	x
Consistency.	3.6	4.3.1, 4.3.2	x
Lather.	3.3	4.3.1	

### 4.3 Test methods.

4.3.1 Performance. Four or more men shall shave using the test shaving soap or creams, a razor with a new, sharp blade, water, and a brush as required. The water shall be warm (100 - 120° F.) having a hardness not greater than 7 grains per gallon (as CaCO<sub>3</sub>). For shaving cream, follow the directions for use on the tube. The shaving soap or cream shall allow a comfortable shave and shall not irritate the skin either during or after the shave. The lather produced by the shaving soap or class 1 shaving cream shall be thick and creamy. It shall spread over the skin smoothly and remain moist on the skin throughout the shave.

4.3.2 Consistency, type II, class 2. Store the filled tube of shaving cream at 32° C. for 24 hours. Apply slight pressure to the tube. The cream shall be extruded as a smooth, homogeneous mass. Spread immediately on the cheek. The cream shall spread smoothly. Place about 1 gram of the cream on a clean glass slide. Cover with another clean glass slide. Press together gently and rub the slides back and forth several times. The cream shall be smooth, homogeneous and free from grit. Store the tube at 15° C. for 24 hours. Examine as above.

## 5. PREPARATION FOR DELIVERY

5.1 Packaging. Packaging shall be level A, B, or C, as specified (see 6.2).

5.1.1 Levels A and B. Shaving soap and shaving cream shall be packaged in accordance with 5.1.1.1 and 5.1.1.2.

5.1.1.1 Unit packaging.

5.1.1.1.1 Type I. Each cake of type I shaving soap shall be packaged in a box conforming to PPP-B-566 or PPP-B-676. The box shall be secured to prevent accidental opening.

5.1.1.1.2 Type II. Each tube of type II shaving cream shall be packaged in a box conforming to PPP-B-566 or PPP-B-676. The box shall be secured to prevent accidental opening.

5.1.1.2 Intermediate packaging.

5.1.1.2.1 Type I. Eight unit packages (as specified in 5.1.1.1.1) of type I shaving soap shall be packaged in a box conforming to PPP-B-566 or PPP-B-676. The box shall be secured to prevent accidental opening.

5.1.1.2.2 Type II. Either six or twelve unit packages (as specified in 5.1.1.1.2) of type II shaving cream of the same class and size shall be packaged in a box conforming to PPP-B-566 or PPP-B-676. The box shall be secured to prevent accidental opening.

5.1.2 Level C. Shaving soap and shaving cream shall be packaged to afford adequate protection against damage during shipment from the supply source to the first receiving agency.

5.2 Packing. Packing shall be level A, B, or C, as specified (see 6.2).

5.2.1 Level A.

5.2.1.1 Type I. Eighty (80) cakes of shaving soap, packaged as specified in 5.1.1.1.1 and 5.1.1.2.1 shall be packed in a box conforming to PPP-B-636, class weather resistant. Each shipping container shall be closed, waterproofed and banded in accordance with the appendix to the box specification.

5.2.1.2 Type II. One hundred forty-four (144) tubes of shaving cream of the same class and size, packaged as specified in 5.1.1.1.2 and 5.1.1.2.2, shall be packed in a box conforming to PPP-B-636, class weather resistant. Each shipping container shall be closed, waterproofed and banded in accordance with the appendix of the box specification.

FFF-C-641D

## 5.2.2 Level B.

5.2.2.1 Type I. Eighty (80) cakes of shaving soap, packaged as specified in 5.1.1.1.1 and 5.1.1.2.1 shall be packed in a box conforming to PPP-B-636, class domestic. The box shall be closed in accordance with the appendix to the box specification.

5.2.2.2 Type II. One hundred forty-four (144) tubes of shaving cream of one class and size, packaged as specified in 5.1.1.1.2 and 5.1.1.2.2, shall be packed in a box conforming to PPP-B-636, class domestic. The box shall be closed in accordance with the appendix to the box specification.

5.2.3 Level C. Shaving soap and shaving cream, packaged as specified in 5.1, in quantities as specified (see 6.2), shall be packed in containers to assure carrier acceptance and safe arrival at destination. Containers shall comply with the Uniform Freight Classification or National Motor Freight Classification as applicable.

## 5.3 Marking.

5.3.1 Tubes. In addition to any markings required by the contract or order, the tubes of type II shaving cream shall be marked with normal commercial markings to include name or tradename of contents, name or trademark of manufacturer, net weight of contents, and directions for use.

5.3.2 Unit packages. In addition to any special marking required by the contract or order, the unit packages shall be marked with normal commercial markings to include the name or tradename of contents, the name or trademark of the manufacturer, and the net weight of the contents. In the absence of normal commercial marking, unit packages shall be marked in accordance with Fed. Std. No. 123 for civil agencies or MIL-STD-129 for military agencies, as specified (see 6.2).

5.3.3 Intermediate packages and shipping containers. In addition to any special marking required by the contract or order, the intermediate packages and shipping containers shall be marked in accordance with Fed. Std. No. 123 for civil agencies or MIL-STD-129 for military agencies, as specified (see 6.2).

## 6. NOTES

6.1 Intended use. The shaving soap and creams covered by this specification are intended for use to provide ease and comfort in shaving.

6.2 Ordering data. Purchasers should select the preferred options permitted herein, and include the following information in procurement documents:

- (a) Title, number, and date of this specification.
- (b) Type, class, and size required (see 1.2).
- (c) Applicable levels of packaging and packing (see 5.1 and 5.2).
- (d) Marking document required (see 5.3).
- (e) Quantities required (see 5.1 and 5.2).

6.3 Type III has been canceled.

### MILITARY INTEREST:

#### User Activity:

Army - GL

### CIVIL AGENCY COORDINATING ACTIVITIES:

GSA-FSS

Preparing activity: GSA-FSS

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Orders for this publication are to be placed with General Services Administration, acting as an agent for the Superintendent of Documents. See Section 2 of this specification to obtain extra copies and other documents referenced herein. Price 30 cents each.