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September 17, 1976
SUPERSEDING
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June 6, 1974

FEDERAL SPECIFICATION

LACQUER, NITROCELLULOSE, ACRYLIC AND ACRYLIC-BUTYRATE, AEROSOL (IN PRESSURIZED DISPENSERS)

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 three types of air-dry lacquers in pressurized dispensers for general purpose applications, furnished in clear, white, black, and in colors. When this specification is cited without reference to type, any type may be furnished.

1.2 Classification. The air-dry lacquers shall be of the following types:

Type I - Nitrocellulose.
Type II - Acrylic.
Type III - Acrylic-Cellulose Acetate Butyrate.

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:

UU-C-282 - Chipboard.
PPP-B-636 - Boxes, Shipping, Fiberboard.
PPP-B-640 - Boxes, Fiberboard, Corrugated, Triple-Wall.
PPP-F-320 - Fiberboard; Corrugated and Solid, Sheet Stock (Container Grade), and Cut Shapes.

Federal Standards:

Fed. Std. No. 102 - Preservation, Packaging and Packing Levels.
Fed. Std. No. 123 - Marking for Shipment (Civil Agencies).
Fed. Test Method Std. No. 141 - Paint, Varnish, Lacquer, and Related Materials; Methods of Inspection, Sampling, and Testing.
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.

(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.)

FSC 8010

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) Standards:

D 609 - Preparation of Steel Panels for Testing Paint, Varnish, Lacquer, and Related Products.
D 1210 - Fineness of Dispersion of Pigment-Vehicle Systems.
D 3335 - Determination of Low Concentration of Lead in Paint by Atomic Absorption Spectroscopy.

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

Chemical Specialties Manufacturers Association (CSMA) Publication:

CSMA Aerosol Guide - Method for Pressure Measurement in Metal Aerosol Containers.

(Application for copies should be addressed to Chemical Specialties Manufacturers Association, Inc., 1001 Connecticut Avenue, N.W., Washington, DC 20036.)

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, N.W., 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 Composition.

3.1.1 Type I lacquer shall be composed of cellulose nitrate, nondrying alkyds, plasticizers, solvents, pigments, and propellants to meet all the requirements of this specification. Polychlorinated biphenyls shall not be used in these products.

3.1.2 Type II lacquer shall be composed of 100% acrylic resins, plasticizers, if needed, solvents, pigments, and propellants to meet all the requirements of this specification. Polychlorinated biphenyls shall not be used in these products.

3.1.3 Type III lacquer shall be composed of 100% acrylic resins modified with 10-25% cellulose acetate butyrate (based on the total resin content), plasticizers, solvents, pigments, and propellants to meet all the requirements of this specification. Polychlorinated biphenyls shall not be used in these products.

3.1.4 Propellant. The propellant shall be a hydrocarbon, a halogenated hydrocarbon, or a blend of hydrocarbons and/or halogenated hydrocarbon(s) as required to assure that the lacquer conforms to the requirements as specified herein. Vinyl chloride shall not be used in these products.

3.2 Dispenser.

3.2.1 Container. The container shall be a commercial-type metal pressure container generally known as an aerosol container of such construction as to assure acceptance of the finished package by common carriers operating in interstate commerce. The capacity of the container shall be sufficient to contain the specified net contents of the product with outage in accordance with commercial practice. Each container shall be labeled as stated in section 5. The contents shall not react with nor be reacted upon by the interior surface of the dispenser or any of the dispenser components.

3.2.2 Dispensing valve. Valves shall have a spray head which can be removed without releasing pressure from the aerosol. The valve shall have an orifice accessible to cleaning with a pin after removal of the spray head. The removable spray head shall contain orifices having such dimensions as to produce spraying properties as required in 3.4.2. The lower end of the dip tube shall not elongate and touch the bottom of the can and shall have a maximum clearance of 6.4 mm (1/4 inch) from the bottom of the can after storage for one week in the product (which allows for swelling of the tube); except for semigloss and flat colors, 3.2 mm (1/8 inch) additional clearance shall be allowed.

3.2.3 Agitator. Each dispenser of pigmented material shall contain one or more agitators which can thoroughly disperse the lacquer when the container is shaken as specified. Agitators used in a lot shall be of the same size and weight.

3.2.4 Cover cap. The valve shall be protected from accidental functioning and damage by a press-fitting metal or plastic cover cap which shall be removable and replaceable. With the exception of the clear the color of the cover cap shall be an approximate match to the color of the lacquer in the container.

3.3 Quantitative requirements.

3.3.1 Pressure. When tested as specified in 4.4.3, the aerosol containers shall not burst or show evidence of leakage, distortion, or any other defects at an equilibrium pressure which shall not exceed 140 p.s.i.g. at 55 ± 1°C (130 ± 2°F). Any failure of this test shall be cause for rejection of the batch.

3.3.2 Net contents. When tested as specified in 4.4.5, the pressurized container shall contain a minimum of 368 g and a maximum of 454 g (13-16 ounces avoirdupois) in a nominal 1-pint can.

3.3.3 Nonvolatile content. When tested as specified in 4.4.6, the nonvolatile content shall be as specified in table I for each color.

3.3.4 Contrast ratio. When tested as specified in 4.4.7, the contrast ratio shall be as specified in table I for each color.

TABLE I. Requirements for minimum contents and contrast ratio

Color number in Fed. Std. No. 595	Color name	Nonvolatile content per can (minimum) grams	Nonvolatile content per can (minimum) ounces avoir	Contrast ratio (minimum)
-	Clear	22.6	0.80	-
	GLOSS COLORS			
10075	brown	54.4	1.92	.97
11105	red	54.4	1.92	.74
11136	red	54.4	1.92	.75
12197	orange	56.7	2.00	.89
12215	orange	56.7	2.00	.90
13538	yellow	54.4	1.92	.78
13618	light yellow	56.7	2.00	.77
13655	yellow	54.4	1.92	.80
14062	green	54.4	1.92	.95
14064	olive drab	54.4	1.92	.99
14110	green	54.4	1.92	.89
14187	green	55.6	1.96	.89
14260	green	56.7	2.00	.97
14491	light green	61.2	2.16	.97
15080	blue	54.4	1.92	.98
15102	blue	56.7	2.00	.98
15193	blue	56.7	2.00	.98
15526	light blue	61.2	2.16	.99
16099	gray	56.7	2.00	.99
16187	gray	56.7	2.00	.99
16307	light gray	59.0	2.08	.99
16440	gray	59.0	2.08	.98
17038	black	45.4	1.60	.98
17043	brass	38.6	1.36	.98
17178	silver	24.9	0.88	.98
17778	ivory	63.5	2.24	.95
17875	white	63.5	2.24	.36
	SEMI-GLOSS COLORS			
21668	pink	63.5	2.24	.96
23722	yellow	62.4	2.20	.96
24052	marine green	54.4	1.92	.96
24233	green	56.7	2.00	.94
25184	blue	56.7	2.00	.94
26132	gray	59.0	2.08	.99
26134	gray	59.0	2.08	.99
26280	gray	59.0	2.08	.99
	FLAT COLORS			
34052	marine green	54.4	1.92	.96
37038	black	40.8	1.44	.98
37875	white	59.0	2.08	.85

3.3.5 Lead content. When tested as specified in table III, the lacquer shall contain not more than 0.5 percent by weight of lead.

3.3.6 Specular gloss. When tested as specified in 4.4.8, the specular gloss shall be as follows:

Gloss colors: 70 minimum (except for brass, color 17043, and silver, color 17178).
Semi-gloss colors: 25 minimum and 45 maximum.
Flat colors: 15 maximum.

3.3.7 Drying time. When tested as specified in 4.4.9, the drying time shall be as follows:

Dust free - 5 minutes maximum.
Tack free - 10 minutes maximum.
Dry through - 2 hours maximum.
Free from after tack - the film shall be free from after tack when tested 24 hours after application of the film, and shall remain free from after tack for 7 days.

3.3.8 Fineness of grind. When tested as specified in 4.4.16, the fineness of grind of the gloss colors shall be a minimum of 7, and of the flat and semi-gloss colors a minimum of 5.

3.3.9 Water content. When tested as specified in 4.4.17, the water content shall not exceed 0.5 percent by weight.

3.4 Qualitative requirements.

3.4.1 Condition in container. The aerosol lacquer shall be dispersible when shaken by hand for not longer than 60 seconds. There shall be no specks, seeds, or other surface irregularities, when tested as specified in 4.4.10.

3.4.2 Spraying properties. When tested as specified in 4.4.10, the content of the aerosol container shall spray evenly when stabilized at a temperature from 15 to 32°C (59 to 90°F). A minimum of 98 percent by weight of content shall be sprayable in a pattern such as to deposit a uniform coating on a smooth vertical surface. The film shall dry free of orange peel, sags, specks, runs, bubbles, craters, seeds, or any other surface irregularity.

3.4.3 Immersion resistance. When tested as specified in 4.4.11, the film shall show no blistering or wrinkling immediately upon removal of the panel from immersion in distilled water. Two hours after removal, the film shall show no more than a slight dulling or whitening. After 24 hours of air drying, the immersed portion of the gloss and semigloss lacquers shall retain a minimum of 90 percent of its original gloss; the immersed portion of flat lacquers shall be within 2 units of the original gloss reading. There shall be no softening nor any change in color of the film after 24 hours of drying.

3.4.4 Self-lifting. When tested as specified in 4.4.12, there shall be no self-lifting when recoated at 1 and 4 hours.

3.4.5 Valve operation. When tested as specified in 4.4.13, the valve, fully opened, shall operate freely without excessive finger pressure. It shall close immediately upon release of finger pressure. The spray shall be continuous, without sputtering or interruption. The valve shall not clog nor collect heavy deposits of coating around the orifice.

3.4.6 Flexibility (cold cracking). When tested as specified in 4.4.14, the lacquer film shall show no cracking or loosening of film from the metal.

3.4.7 Color. When tested as specified in 4.4.15, the specified color shall be a match to the color chip in Fed. Std. No. 595.

3.5 Storage stability. At all times during the year following the date of acceptance the aerosol shall be useable. Sampling shall be in accordance with 4.2. The inspection level shall be S-3, AQL 2.5 percent defective. Useability shall be determined by:

(a) Pressure (see 3.3.1).
(b) Spraying properties (see 3.4.2).
(c) Condition in container (see 3.4.1).
(d) Color (see 3.4.7).
(e) Drying time (see 3.3.8).
(f) Valve operation (see 3.4.5).
(g) There shall be no leaks, rust inside the container, nor other deficiencies which may impair useability (see 3.2).

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.

4.2 Sampling. Sampling for visual examination and testing shall be in accordance with MIL-STD-105.

4.2.1 Visual examination. The inspection level shall be S-4, with an acceptable quality level (AQL) of 2.5 percent defective. Check for the following: leaks, rust, damage (dents, bruises, scratches), film defects, improper marking, ease of operation (shake and spray), and other deficiencies which may impair serviceability.

4.2.2 Tests. Tests shall be performed as indexed in table III. Except as otherwise specified, inspection level S-3, AQL 2.5 percent defective, shall be used for tests performed on end items. Inspection level S-3 shall be used for the pressure test (3.3.1), and failure of any one sample to meet this test shall be cause for rejection of the lot.

4.3 Inspection of preparation for delivery requirements. An inspection shall be made to determine that the packaging, packing, and marking comply with the requirements in section 5. Defectives shall be scored in accordance with table II. For examination of interior packaging, the sample unit shall be one shipping container fully prepared for delivery, selected at random just prior to the closing operations. Sampling shall be in accordance with MIL-STD-105. Defects of closure listed shall be examined on shipping containers fully prepared for delivery. The lot size shall be the number of shipping containers in the end item inspection lot. The inspection level shall be S-2 with an acceptable quality level (AQL) of 4.0 percent defective.

4.3.1 Examination of defects. Examination of defects shall be as outlined in table II.

TABLE II. Classification of preparation for delivery defects

Examine	Defects
Markings (exterior and interior)	Omitted; incorrect; illegible; improper size location, sequence, or method of application.
Materials	Any component missing or damaged.
Workmanship	Inadequate application of components such as incomplete closure of container flaps, loose strapping, inadequate stapling. Distortion of container.
Contents (exterior and interior container)	Number per container is more or less than required. Net weight exceeds requirements.

4.4 Test procedures. Samples shall be tested as specified in table III. Unless otherwise specified, standard testing conditions are 23 ± 1°C (73 ± 2°F) and a relative humidity of 50 ± 5 percent. Failure to pass any test, or noncompliance with any requirement, shall be cause for rejection of the lot.

TABLE III. Index

Characteristics	Requirement paragraph	Applicable tests Fed. Test Method Std. No. 141 or ASTM Method	Test paragraph
Composition	3.1	-	4.4.1
Propellant	3.1.4	-	4.4.1
Dispenser	3.2	-	4.4.4
Pressure	3.3.1	-	4.4.3
Net contents	3.3.2	-	4.4.5
Nonvolatile content	3.3.3	4044	4.4.6
Contrast ratio	3.3.4	4122	4.4.7
Lead content	3.3.5	D 3335	-
Specular gloss	3.3.6	6101	4.4.8
Drying time	3.3.7	4061	4.4.9
Fineness of grind	3.3.8	D 1210	4.4.16
Water content	3.3.9	4082	4.4.17
Condition in container	3.4.1	-	-
Spraying properties	3.4.2	D 609	4.4.10
Immersion resistance	3.4.3	-	4.4.11
Self-lifting	3.4.4	-	4.4.12
Valve operation	3.4.5	-	4.4.13
Flexibility	3.4.6	6223	4.4.14
Color	3.4.7	4250	4.4.15

4.4.1 Testing of the aerosol under this specification shall be for the purpose of acceptance of individual lots. Acceptance testing shall consist of all tests covered by this specification except storage stability (3.5). The right is reserved to make any additional tests deemed necessary to determine that the lacquer meets the requirements of the specification.

4.4.1.1 Supplier tests in process, in place of complete tests on samples of the finished dispensers, may be accepted where applicable for the purpose of lot acceptance, except that tests for pressure (3.3.1), net contents (3.3.2), spraying properties (3.4.2), and valve operation (3.4.5), shall be made after packaging.

4.4.2 Test concentrate. With the container well-agitated and in an upright position, pierce the top with a pointed instrument, making a very fine hole which will allow the propellant to escape (conditioning at low temperature for one hour will facilitate this). After a few minutes, the hole can be enlarged, and as soon as there is no further evidence of gas escaping, the top of the container can be cut open. Allow to stand until the contents are at room temperature, then transfer the contents quantitatively into a tared beaker using several washes of acetone. Evaporate on a water bath until no more propellant is liberated, and until the remainder is less than 40 percent of the original weight of the contents including propellant. Then readjust to exactly 40 percent of the original weight of the contents with n-butyl acetate.

4.4.2.1 For the qualitative tests, the manufacturer may use the lacquer concentrate as it exists before packaging and pressurization, provided it is adjusted as specified in 4.4.2.

4.4.3 Pressure. Containers filled for shipment shall be submerged for 15 minutes in a water bath maintained at 55 ± 1°C (131 ± 2°F). The pressure shall be measured after 15 minutes of immersion in accordance with method described in CSMA Aerosol Guide, "Methods for Pressure Measurement in Metal Aerosol Containers," method 2. Check for compliance with 3.3.1.

4.4.4 Dispenser. The dispenser and its component parts shall be inspected and evaluated for compliance with 3.2.

4.4.5 Net content. The total net contents shall be determined by calculating the difference in weight between the filled container and the completely empty one (see 4.4.2 for procedure of emptying). Wash out interior of can with acetone and dry. (Note that the weight of the agitators must be included in the tare.) Using the completely emptied container as a tare, additional checks can be made on filled containers. At least two containers shall be checked from each lot sampled, since variations in weight of empty cans can be found. A check on full and empty cans shall be made on the same cans, and conformance with 3.3.2 shall be determined.

4.4.6 Nonvolatile content. Using the test concentrate, adjusted as specified in 4.4.2, determine the nonvolatile content in accordance with method 4044 of Fed. Test Method Std. No. 141. The nonvolatile content shall then be calculated by multiplying the nonvolatile figure by the percent to which the test concentrate was adjusted and dividing by 100. Check for compliance with 3.3.3.

4.4.7 Contrast ratio. Draw down a film of the test concentrate to a dry-film thickness of 0.051 ± 0.005 mm (0.002 ± 0.0002 in) on a black and white surface (carrara glass or sealed chart). Allow film to dry for 24 hours at room temperature, and determine the contrast ratio in accordance with method 4122 of Fed. Test Method Std. No. 141. Evaluate for compliance with 3.3.4.

4.4.8 Specular gloss. Spray out sufficient coats on a plane opaque glass panel to obtain complete hiding. Measure the specular gloss in accordance with method 6101 of Fed. Test Method Std. No. 141, and evaluate for compliance with 3.3.6.

4.4.9 Drying time. Spray out one coat of lacquer on a glass panel to a dry film thickness of 0.013 ± 0.003 mm (0.0005 ± 0.0001 in). Check the drying time in accordance with method 4061 of Fed. Test Method Std. No. 141, and evaluate for compliance with 3.3.7.

4.4.10 Spraying properties. Prepare a 100- by 300-mm (4- by 12-in) steel panel in accordance with ASTM Method D 609, (Type 1, method 5B). Set the panel at an angle of approximately 15° from the vertical. Hold the dispenser in an upright position parallel to the panel at a distance of 250 to 300 mm (10 to 12 in), and with the valve fully open, move the dispenser horizontally from one side of the panel to the other using a stroking motion. Spray in overlapping horizontal strokes from the top to the bottom of the panel. Apply two thin coats (each coat at approximately 0.0127 mm (0.0005 in) dried film thickness), one after the other. The second thin coat can be applied by spraying vertically in overlapping strokes from side to side. After application of the second thin coat, place the panel in a vertical position, allow to dry for 5 minutes, and examine the film for compliance with 3.4.2.

Continue spraying the contents to completion on a flat surface and note the spraying properties. Weigh the can. Open the can and wash out the left-over lacquer; then allow to dry for at least 2 hours. Weigh the can; then calculate the leftover lacquer as follows:

$$\text{Percent of leftover lacquer} = \frac{B-C}{A-C} \times 100$$

Where: A = weight in grams of full can.
B = weight in grams of empty can after spraying.
C = weight in grams of empty can thoroughly washed.

Check the results for compliance with the requirements of 3.4.2.

4.4.11 Immersion resistance. Spray a film on a tin panel, prepared in accordance with method 2021 of Fed. Test Method Std. No. 141, to a dry film thickness of 0.025 ± 0.003 mm (0.001 ± 0.0001 in). Air dry for 18 hours, then immerse in distilled water at room temperature for 16 hours. Evaluate for compliance with 3.4.3.

4.4.12 Self-lifting. Spray from the container, on two glass panels, a coat of lacquer at a dry film thickness of 0.013 mm (0.0005 in). Dry at standard conditions of temperature and humidity. Recoat one panel after 1 hour and the second panel after 4 hours at the same film thickness. Evaluate for compliance with 3.4.4.

4.4.13 Valve operation. Spray from the dispenser with the valve fully open for 15 seconds each time, once per day, on any 7 days over a period of 10 days. Observe performance for compliance with 3.4.5. (After each spraying period, the valve shall be cleared according to manufacturer's directions.)

4.4.14 Flexibility (cold cracking). The flexibility tests shall be performed as specified in method 6223 of Fed. Test Method Std. No. 141. The panel shall be as specified in method 2012, paragraph 1.2. The method of application shall be by drawing down the test concentrate, prepared as specified in 4.4.2, with a film applicator to a dried film thickness of 0.025 ± 0.005 mm (0.001 ± 0.0002 in). The panel shall be air-dried at room temperature for 48 hours. Bend over a 6.4 mm (1/4-in) diameter rod and determine compliance with 3.4.6.

4.4.15 Color. Spray from the container on an aluminum alloy panel (method 2013) or tin panel (method 2012) until a film thickness which gives complete hiding is obtained. Allow to dry for 24 hours at room temperature. Determine the color in accordance with method 4250 of Fed. Test Method Std. No. 141, and evaluate for compliance with 3.4.7.

4.4.16 Fineness of grind. Using the test concentrate prepared as specified in 4.4.2, determine the fineness of grind in accordance with method 4411 of Fed. Test Method Std. No. 141. Check for compliance with 3.3.8.

4.4.17 Water content. With the container well-agitated and in an upright position, pierce the top with a pointed instrument, making a very fine hole which will allow the propellant to escape (conditioning at low temperature for one hour will facilitate this). After a few minutes, the hole can be enlarged, and as soon as there is no further evidence of gas escaping, the top of the container can be cut open. Allow to stand until the contents are at room temperature. Perform the test in accordance with method 4082 of Fed. Test Method Std. No. 141, and evaluate for compliance with 3.3.9.

5. PREPARATION FOR DELIVERY

5.1 Packaging. (See 3.2.)

5.2 Packing.

5.2.1 Level A. Twelve dispensers of the same description shall be packed in a close-fitting box conforming to PPP-B-636, V3c; or PPP-B-640, class 2. The boxes shall be closed and strapped in accordance with the appendix to the applicable box specification. The gross weight of the V3c box shall not exceed the weight limitations of PPP-B-636.

5.2.2 Level B. Twelve dispensers of the same description shall be packed in a close-fitting box conforming to PPP-B-636, class domestic. Separators the full height of the box shall be required conforming to UU-C-282, 0.040 in minimum thickness, or PPP-F-320. The box shall be closed in accordance with the appendix to PPP-B-636.

5.2.3 Level C. The lacquer, packaged as specified in 5.1, shall be packed to insure carrier acceptance and safe delivery to destination. Containers shall comply with Uniform Freight Classification Rules or National Motor Freight Classification Rules, as applicable.

5.3 Marking.

5.3.1 Civil agencies. Packages and shipping containers shall be marked in accordance with Fed. Std. No. 123.

5.3.2 Military activities. Packages and shipping containers shall be marked in accordance with MIL-STD-129.

5.3.3 Special marking. Legible commercial marking shall be acceptable. Cans overcoated to obliterate original marking shall not be acceptable. Marking shall be lithographed on the unit container or printed on a label securely affixed to the container and shall include the following:

(a) Color number of Fed. Std. No. 595.
(b) Net weight in ounces.
(c) Name of material.
(d) Directions for use including surface preparation.
(e) A formula in general terms.
(f) "For best results use at temperatures between 16 and 32°C (60 and 90°F)."
(g) Date of manufacture.
(h) "Do not puncture or burn."
(i) "Keep from fire or flame."
(j) "Use with adequate ventilation."
(k) "Avoid repeated contact with skin."
(l) "Store below 49°C (120°F)."
(m) "Keep from children."
(n) "Shake for 60 seconds before use".

6. NOTES

6.1 Intended uses. Lacquer in pressurized dispensers provides a quick, convenient method for painting small objects or areas. It can be applied on metal, wood, paper, linoleum, masonry, glass, leather, or fibre, and over bare or previously painted surfaces such as furniture, machinery, tools, radiators, window frames, trim, shutters, garden implements, and electrical and electronic equipment. For maximum corrosion resistance on metals, a quick-drying lacquer-resistant inhibiting primer should be applied as a first coat. Surfaces to be sprayed should be clean, dry, and free from oily or greasy films. High gloss surfaces should be scuffed with steel wool before spraying.

6.1.1 It should be noted that application of lacquer on certain coatings (depending upon type and age of the film) or on plastics can result in lifting or crazing. A small test area should be sprayed to determine any unsatisfactory results. This will show up in a few minutes if an unfavorable condition exists.

6.2 It should not be necessary to specify the type of the material, for each type meets the specified requirements and will normally be acceptable. However, for exterior applications, type II acrylic or type III acrylic-cellulose acetate butyrate lacquer is considered preferable.

6.3 Net contents. The unit can will be known as a 1-pint can. Unless otherwise specified, it shall be understood that the weight of the contents may be from 368 to 454 grams (13 to 16 ounces avoidupois), at the discretion of the supplier, provided the nonvolatile in the content supplied is in accordance with 3.3.3. The purpose is to permit wide latitude in formulation, while ensuring uniform value of each unit based on lacquer solids. The net weight therefore need not be specified.

6.4 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 and color required (see 1.2 and 6.2).
(c) Selection of applicable levels of packaging and packing (see 5.1 and 5.2).
(d) Availability of color chips.
(e) Size of container (1-pint unless otherwise specified).
(f) Quantities of unit packages in shipping container (see 5.2.1).

Preparing activity:

GSA-FSS

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 35 cents each.