Downloaded from http://www.everyspec.com

NOTICE OF CANCELLATION

TT-S-1543B NOTICE 1 January 23, 2006

FEDERAL SPECIFICATION

SEALING COMPOUND: SILICONE RUBBER BASE (FOR CAULKING, SEALING, AND GLAZING IN BUILDINGS AND OTHER STRUCTURES)

Federal Specification TT-S-1543B dated June 24, 1996 is to be destroyed or discarded since it does not describe the product as defined by the title.

Preparing Activity: GSA-FSS

FSC 8520

[METRIC] TT-S-1543B June 24, 1996 SUPERSEDING A-A-1543A May 14, 1982

FEDERAL SPECIFICATION

SEALING COMPOUND: SILICONE RUBBER BASE (FOR CAULKING, SEALING, AND GLAZING IN BUILDINGS AND OTHER STRUCTURES)

1 <u>Scope</u>. This commercial item description covers a powdered hand cleaner product, consisting of soap and borax for use in washroom dispensers to remove heavy occupational soils such as oils and greases.

2. <u>Classification</u>. The product shall be of the following classes:

2.1 Class 1 - Plain

2.2 Class 2 - With lanolin

3. Salient characteristics:

3.1 The product shall conform to ASTM D 3046 - Powdered Hand Cleaner (Soap with Borax), except that paragraph 3.2 shall not apply.

3.1.1 Class 1 - Class 1 shall comply with Type A of ASTM D 3046.

3.1.2 Class 2 - Class 2 shall comply with Type B of ASTM D 3046.

3.2 The issue of ASTM D 3046, in effect on the date of the solicitation, shall be used to determine compliance with stated requirements.

3.3 <u>Percent lanolin</u>. The percent lanolin is determined colorimetrically based on the cholesterol present in lanolin. Cholesterol in chloroform solution in the presence of acetic anhydride and concentrated sulfuric acid produces a color which varies in intensity with the cholesterol concentration. Total cholesterol in the sample is determined, corrected for the cholesterol present in the soap, and the percent lanolin in the sample calculated.

3.3.1 <u>Apparatus</u>. Any commercial colorimeter having an approximate spectral range of 640 to 700 nanometers may be used to determine the absorbance of the samples. The instrument shall be adjusted to zero using a blank 25 ml of chloroform treated as specified in the color development section, omitting the lanolin.

3.3.2 <u>Standard calibration curve</u>. A sample of the batch of the lanolin used by the manufacturer to make the product being tested shall be collected at the time of manufacture and used to make the standard calibration curve. Place 0.2 g of this lanolin into a tared 50-ml beaker and weigh to the nearest milligram. Dissolve the lanolin chloroform, transfer quantitatively to a 200-ml volumetric flask and make up to the mark with chloroform. Pipette exactly 3.0, 6.0, 9.0, 12.0, and 15.0 ml quantities of this lanolin solution into separate 50-ml glass-stoppered graduated cylinders. Add chloroform to each cylinder to yield 25 ml of solution in each and develop the color as specified below. Prepare a standard curve by plotting colorimeter readings versus the milligrams of lanolin in the graduated cylinder.

3.3.3 Procedure. Make all determinations in duplicate.

Beneficial comments, recommendations, additions, deletions, clarification, etc., and any data which may improve this document, should be sent to: GSA, Paints and Chemicals Center, 400 15th Street, S.W., Auburn, WA 98001.

FSC 8520

CID A-A-1543B

3.3.4 <u>Sample preparation</u>. Place 10 g each of the well-mixed product and the soap portion into separate tared Soxhlet extraction thimbles and weigh to the nearest milligram. Extract with petroleum ether in a Soxhlet apparatus for 3 hours. Evaporate the petroleum ether solution to dryness on a steam bath. Dissolve the residue in chloroform, transfer quantitatively to a 250-ml volumetric flask and make up to the mark with chloroform. Pipette 10 ml of the chloroform solution into a 50-ml glass stoppered cylinder and add chloroform to the 25 ml mark.

3.3.5 <u>Color development</u>. Cool the cylinder in an ice bath for 5 minutes. Pipette 10 ml of acetic anhydride into the cylinder and then add concentrated sulfuric acid dropwise from a 1-ml graduated pipette at a rate of 2 drops per minute for 7 minutes and 3 drops per minute for the next 3 minutes, stoppering the cylinder after each acid addition and mixing thoroughly by inverting the cylinder several times. Keep the cylinder in the ice bath between additions of acid. Remove the cylinder from the bath and store in a dark place for exactly 20 minutes and then determine the color intensity in the colorimeter.

3.3.6 <u>Calculations</u>. For every sample of the finished product and soap portion calculate the "equivalent percent lanolin" as follows:

"Equivalent percent lanolin" = 2.5 X (A/B)

where:

A = mg of lanolin from the standard curve equivalent to the measured color intensity of the sample.

B = weight in grams of the sample.

The percent lanolin in the finished product shall be calculated as follows:

Percent lanolin + C - DxE/100

where:

- 2 - ---

C = average "equivalent percent lanolin" in the finished product.

D = average "equivalent percent lanolin" in the soap portion.

E = percent soap in the finished product

4. QUALITY ASSURANCE PROVISIONS:

4.1 <u>Product Conformance</u>. The products provided shall meet the salient characteristics of this commercial item description, conform to the producer's own drawings, specifications, standards, and quality assurance practices and be the same product offered for sale in the commercial market. The Government reserves the right to require proof of such conformance.

5. <u>Packaging, packing, and marking</u>. The packaging, packing, and marking shall be as specified in the contract or order.

MILITARY INTEREST:

CIVIL AGENCY COORDINATING ACTIVITIES:

<u>Custodians</u> Army GL Air Force - 99

Review Activity:

Army MD

GSA - FSS

Preparing Activity: GSA - FSS