

[METRIC]
 A-A-1270
April 16, 1996
 SUPERSEDING
 MMM-A-180C Cl A
 August 6, 1979

COMMERCIAL ITEM DESCRIPTION

ADHESIVE, POLYVINYL ACETATE EMULSION, GENERAL PURPOSE

The General Services Administration has authorized the use of this commercial item description as a replacement for Federal Specification MMM-A-180C Class A, for all Federal Agencies

1 SCOPE This commercial item description covers a nonflammable, nontoxic, water based polyvinyl acetate emulsion (also known as "white glue"), that dries clear to form strong bonds on almost all porous and semi-porous materials. This adhesive is for general office or household indoor use for bonding lightweight fabrics, paper, light wood or bookbinding.

2 SALIENT CHARACTERISTICS

2.1 Appearance and application properties The adhesive, in a freshly opened container shall be smooth, uniform and free from lumps, skins or foreign matter. It shall flow and spread evenly and smoothly when applied by brushing, roller coating or dipping.

2.2 The product shall meet the requirements in Table I.

TABLE I

Characteristic	Minimum	Maximum	Test ¹
Viscosity, cp	2000	6000	ASTM D 1084 Method B
pH	4	6	ASTM E 70
Compression shear strength, maple blocks, kPa (psi)	17200 (2500)	—	ASTM D 905
Tension shear strength, birch plywood ² , kPa (psi)	2750 (400)	—	ASTM D 906

¹ Manufacturer may use tests shown in this table or an equivalent test to verify compliance to those requirements. The tests listed will be used in case of dispute.

² 3mm thick basswood may be used in lieu of birch plywood.

2.3 Prohibited material The product shall not contain (other than trace impurity amounts, not to exceed 0.6% liquid wt), any of the following: hydrolyzable chlorine derivatives, ethylene based glycol ethers and their acetates, any carcinogen, as defined in 29 CFR 1910.1200, any of the 17 target chemicals on the EPA 33/50 program list, [These chemicals are benzene, cadmium & compounds, carbon tetrachloride, chloroform, chromium & compounds, cyanides, lead & compounds, mercury & compounds, methyl ethyl ketone, methyl isobutyl ketone, methylene chloride, nickel & compounds, tetrachloroethylene, toluene, trichloroethane, trichloroethylene, and xylenes], NOR any ozone depleting compound (as listed in the Federal Register notice of July 30, 1992 (57 Fed Reg 33753), which include chlorofluorocarbons, halons, carbon tetrachloride, methyl chloroform, and hydrochlorofluorocarbons).

2.4 Freeze/thaw stability Store a sample of the product at -18°C (0°F) for 18 hours. Remove from freezer and restore to a temperature of 24°C (75°F) without stirring. This constitutes one freeze-thaw cycle. After 5 freeze/thaw cycles, the sample shall meet all appearance and application properties and all requirements in Table I.

Beneficial comments, recommendations, additions, deletions, clarifications, etc. and any data which may improve this document should be sent to General Services Administration, Engineering and Commodity Management Division (10FTE), 400 15th St SW, Auburn, WA 98001.

FSC 8040

DISTRIBUTION STATEMENT A: Approved for public release. Distribution is unlimited.

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2.5 Storage life After storing a sample of adhesive at 24°C (75°F) for 18 months, the sample shall meet all appearance and application properties and all requirements in Table I. There shall be no evidence of any biological growth.

3 QUALITY ASSURANCE PROVISIONS

3.1 Commercial Quality The products provided shall 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 prior to first delivery and thereafter as may be otherwise provided for under the provisions of the contract.

4 PACKAGING

The packaging and packing shall be as specified in the contract or order.

5 NOTES

5.1 Intended use This product corresponds to Class A of MMM-A-180. It is for general purpose bonding of paper, fabrics and wood. Not for use on photos, bare metal or joints subjected to heat, soaking or high stress.

5.2 Referenced documents

Federal Regulations

29 CFR Part 1910.1200

The code of Federal Regulations (CFR) is for sale mail order by the Superintendent of Documents, ATTN: New Order, PO Box 371954, Pittsburgh, PA 15250-7954.

ASTM Methods

ASTM D 905 - Strength Properties of Adhesive Bonds in Shear by Compression Loading

ASTM D 906 - Strength Properties of Adhesives in Plywood Type Construction in Shear by Tension Loading

ASTM D 1084 - Viscosity of Adhesives

ASTM E 70 - pH of Aqueous Solutions with the Glass Electrode

ASTM standards are available from the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959. The issue of the ASTM test methods in effect on the date of the solicitation shall be used to determine compliance with these requirements.

EPA 33/50 Program Information on the EPA 33/50 program is available from US EPA 33/50 Program (TS-792A), 401 M Street SW, Washington, DC 20460.

MILITARY INTEREST

CIVIL AGENCY INTEREST

COORDINATING ACTIVITY

Army - MR, Navy - AS, Air Force - 99

COORDINATING ACTIVITY

GPO

REVIEW ACTIVITIES

Army - AR, Air Force 64

PREPARING ACTIVITY

USER ACTIVITIES

Army - AT, EA, Navy YD

GSA-FSS