

NATIONAL AEROSPACE STANDARD

AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC., 1725 DE SALES STREET, N. W., WASHINGTON 6, D. C.

FED SUP CLASS
6850

CLEANER, METAL, SOAK TYPE WATER BASED

1.0 SCOPE (2) INACTIVE FOR DESIGN AFTER 29 Dec. 1981

- 1.1 This specification covers the performance requirements for water based cleaning material used in non-electrolytic soak tank cleaning process. The water base cleaner process is a replacement for the chlorinated solvent vapor degreasing operation.

2.0 APPLICABLE DOCUMENTS

- 2.1 The following specification and standard of issue on the date of the purchase order, form a part of this specification to the extent specified herein:

ASTM Procedure D1281-57

3.0 REQUIREMENTS

3.1 Materials:

The material shall form an aqueous emulsion using 60-80°F water containing a minimum total solids of 900 ppm and minimum hardness of 150 ppm. The operating concentration shall not contain more than five percent organic solvent.

3.2 Cleaning

- 3.2.1 Operating Conditions: - The maximum soak time in an air agitated tank shall be twenty minutes at a maximum temperature of 120°F. Rinsing after soak shall be suitable using 60-80°F water of maximum hardness of 200 ppm.
- 3.2.2 Water Break Free Requirement: - The cleaning process shall be capable of removing by displacement, deflocculation, or solubilization such contaminants as forming oils or compounds (chlorinated paraffins, mineral oils, waxes, soluble oils, sulfurized oils, soaps, talc, etc.), inorganic salts (soils), soluble cutting oils, and preservative oils and greases. The cleaning operation for removal of contaminants specified by the procuring agency shall provide a water break free surface when tested as specified in paragraph 4.1.
- 3.2.3 Chemically Clean Requirements: - The cleaning procedure shall be suitable for metals which are subsequently subjected to a heating operation (heat treating, annealing, spot welding, etc.). The cleaning operation for removal of contaminants specified by the procuring agency shall provide a chemically clean surface when tested as specified in paragraph 4.2.

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CUSTODIAN: AEROSPACE RESEARCH AND TESTING COMMITTEE

PROCUREMENT
SPECIFICATION

None

TITLE

CLEANER, METAL, SOAKTYPE, WATER BASED

CLASSIFICATION
SPECIFICATIONNAS 1619
Sheet 1 of 2

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APPROVAL DATE Sept. 1960 REVISION (1) 1 May 1964 (2) 29 Dec. 1981

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3.0 REQUIREMENTS (CONT'D)

② INACTIVE FOR DESIGN AFTER 29 Dec. 1981

3.3 Toxicity and Waste Disposal

The compound shall not contain any combination of ingredients which might be hazardous to health when used in accordance with the directions specified by the manufacturer nor shall it contain any ingredients for which the degree of hazard has not been appraised.

3.4 Chemical Attack

Metal removal, if any, shall be uniform and not greater than 0.00005 inch per side during full soak time.

3.5 Discoloration

The cleaning process shall not discolor ferrous and non-ferrous alloys.

4.0 TEST METHODS4.1 Water Break Free

Perform "Rinsing Properties of Metal Cleaners" ASTM D1281-57. Observe for water breaks.

4.2 Chemically Clean

Place the cleaned 0.020" x 4" x 6" SAE 4130 alloy steel panels on the lip of a standard muffle furnace at 1600°F with the edge one inch inside the furnace. The operator shall observe the progress of the discoloration front. Mottled or non-uniform discoloration is cause for rejection and indicates a non-chemically cleaned surface.

5.0 PREPARATION FOR DELIVERY

5.1 Each container of material shall be permanently and legibly marked to give the following information:

Cleaner, Metal, Soak Type Water Based

Material Specification Number NAS 1619

Purchase Order No. _____

Quantity _____ Batch Number _____

Manufacturer _____

Date of Manufacture _____

CUSTODIAN AEROSPACE RESEARCH AND TESTING COMMITTEE		
PROCUREMENT SPECIFICATION	TITLE	CLASSIFICATION
		SPECIFICATION
None	CLEANER, METAL, SOAK TYPE WATER BASED	NAS 1619 Sheet 2

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