

MIL-I-17433C(SH)
4 June 1986
SUPERSEDING
MIL-I-17433B(SHIPS)
22 May 1969
(See 6.5)

MILITARY SPECIFICATION

INHIBITOR, HYDROCHLORIC ACID DESCALING AND PICKLING SOLUTIONS

This specification is approved for use within the Naval Sea Systems Command, Department of the Navy, and is available for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This specification covers liquid inhibitors for minimizing the deleterious effects of hydrochloric (muriatic) acid on metal, while not interfering with the removal of either waterside deposits or corrosion products present on the surface.

2. APPLICABLE DOCUMENTS

2.1 Government documents.

2.1.1 Specifications and standards. The following specifications and standards form a part of this specification to the extent specified herein. Unless otherwise specified, the issues of these documents shall be those listed in the issue of the Department of Defense Index of Specifications and Standards (DoDISS) and supplement thereto, cited in the solicitation.

SPECIFICATIONS

FEDERAL

PPP-C-96 - Cans, Metal, 28 Gage and Lighter.
PPP-P-704 - Pails, Metal: (Shipping, Steel, 1 through 12 Gallons).

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Commander, Naval Sea Systems Command, SEA 55Z3, Department of the Navy, Washington, DC 20362-5101 by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC N/A

FSC 6850

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MILITARY

- MIL-T-16286 - Tubes, Steel, Seamless, Marine Boiler Application.
- MIL-B-26701 - Bottles, Screw Cap and Carboys Polyethylene Plastic.

STANDARDS

FEDERAL

- FED-STD-313 - Material Safety Data Sheets Preparation and the Submission of.

MILITARY

- MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes.
- MIL-STD-129 - Marking for Shipment and Storage.
- MIL-STD-147 - Palletized Unit Loads.

2.1.2 Other Government document. The following other Government document forms a part of this specification to the extent specified herein. Unless otherwise specified, the issue shall be that in effect on the date of the solicitation.

DEPARTMENT OF TRANSPORTATION

Code of Federal Regulations, Title 49

(Application for copies should be addressed to the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.)

(Copies of specifications, standards and other Government documents required by contractors in connection with specific acquisition functions should be obtained from the contracting activity or as directed by the contracting activity.)

2.2 Other publications. The following documents form a part of this specification to the extent specified herein. Unless otherwise specified, the issues of the documents which are DoD adopted shall be those listed in the issue of the DoDISS specified in the solicitation. Unless otherwise specified, the issues of documents not listed in the DoDISS shall be the issue of the nongovernment documents which is current on the date of the solicitation.

NATIONAL MOTOR FREIGHT TRAFFIC ASSOCIATION, INC., AGENT
National Motor Freight Classification

(Application for copies should be addressed to the National Motor Freight Traffic Association, Inc., ATA TRAFFIC Dept., 2200 Mill Road, Alexandria, VA 22314.)

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UNIFORM CLASSIFICATION COMMITTEE AGENT

Uniform Freight Classification Ratings, Rules and Regulations

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

(Nongovernment standards and other publications are normally available from the organizations which prepare or which distribute the documents. These documents also may be available in or through libraries or other informational services.)

2.3 Order of precedence. In the event of a conflict between the text of this specification and the references cited herein (except for associated detail specifications, specification sheets or MS standards), the text of this specification shall take precedence. Nothing in this specification, however, shall supersede applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 Weight loss. When tested as specified in 4.5.2, the weight loss shall not exceed 0.0020 pound per square foot per hour.

3.2 Staining and filming of metal. The inhibited hydrochloric acid solution shall not cause filming, staining, or deposit on metal surfaces. These effects will be ascertained from visual observation of specimens following the test as specified in 4.5.2.2.

3.3 Arsenic. The inhibitor shall contain not more than 0.01 percent of arsenic when tested as specified in 4.5.3.

3.4 Inhibitor strength. Inhibitor use concentrations shall not exceed 0.2 percent by weight (see 4.5.1.1) and must limit metal loss as specified in 3.1.

3.4.1 Compatibility. The inhibitor at concentrations required as specified in 3.4 must be compatible with the acid solution as formulated and as specified in 4.5.1.1. No adherent deposits shall form on the metal surfaces and copper plating shall not occur.

3.5 Precautionary labeling. Complete, concise instructions for use of the inhibitor, as well as safety precautions, shall be legibly labeled in a durable manner on the container (see 5.3).

3.6 Material safety data sheet. The contracting activity shall be provided a material safety data sheet (MSDS) at the time of contract award. The MSDS form and requirements for its preparation are found in FED-STD-313. The MSDS shall be included with each shipment of the material covered by this specification. The MSDS shall provide available pertinent toxicity information, and delineate acceptable personal protective measures for use when applying the product (see 6.3).