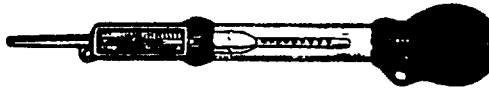


FED. SUP CLASS
6630



ARMY - AV, AR, ER, ME
NAVY - CG, MC, OS

USER ACTIVITIES:

PART NUMBER	NOMENCLATURE
MS36547-1	Tester, Battery Electrolyte Solution
REPLACEABLE COMPONENT PARTS	
MS36547-2	Graduated Scale Hydrometer (tropical)
MS36547-3	Graduated Scale Hydrometer (temperate)
MS36547-4	Graduated Scale Hydrometer (arctic)

NOMINAL HYDROMETER DATA				NOMINAL BARREL DATA (IN.)			NOMINAL TUBE DATA (IN.)			NOMINAL TIPBODY DATA (IN.)		
TYPE	SP GR RANGE	LG (IN.)	BODY OD (IN.)	LG	OD	WALL THK	OD	LG	OD	LG	OD	LG
TROPICAL	1.040-1.280	---	---	4.75	1.65	0.059	0.25	3.3125	2	10.875		
TEMPERATE	1.120-1.360	4.5	0.531									
ARCTIC	1.180-1.400	---	---									

MATERIAL: Tester barrels and hydrometers shall be of borosilicate glass in accordance with ASTM E 438, Type I, Class A.

Ballast shall be of lead shot, mercury, or fused metal alloy.

Rubber components shall be acid-resistant, show no discoloration and shall be pliable at low temperatures.

Scales shall be printed on white plastic or No. 1 white sulfite paper with graduations made in permanent black or red marking material, such as India ink.

Adhesives used for bonding any part of the tester shall be resistant to sulfuric acid with specific gravity up to 1.400 and capable of retaining adhesive qualities without weakening or becoming brittle.

DESIGN: Tester shall consist of a bulb, a barrel, a tipbody, a plug, a thermometer, and three interchangeable hydrometers.

Bulb shall be capable of drawing solution into the barrel and retaining it when the bulb is released. It shall be removable so the hydrometers can be interchanged.

Tipbody shall be fastened to the lower end of the barrel and shall contain a thermometer with a specific gravity chart. It shall have a tube connecting the tip to the barrel to prevent the solution from damaging the thermometer or chart.

Plug shall be placed in the upper end of the barrel to prevent the hydrometer from entering the bulb.

Hydrometers shall be of the constant-mass, variable displacement type and shall have a stem and body.

Stem shall have a securely fastened scale 1.75 inches long marked in increments of 0.010 specific gravity with an accuracy rating over the entire scale of 0.005 specific gravity.

Hydrometer shall be calibrated at 80°F.

Ballast shall be securely contained in the lower portion of the hydrometer body.

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.
 This military standard is approved for use by all Departments and Agencies of the Department of Defense. Selection for all new engineering and design applications and for repetitive use shall be made from this document.

P. A.	EA	INTERNATIONAL INTEREST	TITLE	MILITARY STANDARD
Other Cust	MS 99		TESTER, BATTERY ELECTROLYTE SOLUTION, (tropical, arctic and temperate types)	MS36547
Procurement Specifications	MIL-H-12240	SUPERSEDES:		SHEET 1 OF 2

APPROVED 7 OCT 1968 REVISED (A) 18 JUN 1988

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Thermometer range shall be -65° to 165°F in increments of 5 degrees with a minimum scale length of 2.875 inches. Temperatures above 0°F shall be printed in black and those below shall be printed in red.

PURPOSE: For determining the specific gravity of storage battery electrolyte solutions at temperatures and ranges specified herein.

- NOTES:**
1. Replacement data shall be marked on each hydrometer scale, showing the type of hydrometer, the military designation, and any other information necessary to facilitate replacement.
 2. Items differing from this Military Standard by minor variations in design or dimensions are considered standard under this document, provided such variations do not affect performance and are not in conflict with the material requirements as specified herein.
 3. For design feature purposes, this standard takes precedence over procurement document referenced herein.
 4. Referenced documents shall be of the issue in effect on date of invitations for bid.

USER ACTIVITIES:

REVIEWER ACTIVITIES:

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APPROVED REVISED

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Procurement Specifications MIL-H-12240	SUPERSEDES:		SHEET 2 OF 2