INCH-POUND
MIL-L-3055C
AMENDMENT 1
19 MARCH 1993

MILITARY SPECIFICATION

LEAD AZIDE

This amendment forms a part of Military Specification MIL-L-3055C, dated 12 January 1993, and is approved for use by all Departments and Agencies of the Department of Defense.

The attached insertable replacement pages listed below are replacements for stipulated pages. When the new pages have been entered in the document, insert the amendment as the cover sheet to the specification.

Replacement page	Page replaced
*17	Reprinted without change
*18	18

*Indicates specific pages revised by this Amendment.

Custodian:
Army (AR)

Review activities:
Navy - OS

Preparing activity:
Army (AR)

Project number:
1376-0465

4.5.1 Preparation of dry sample. Transfer a portion of about 25 gms of the wet sample obtained in 4.4.3.1 to a Buchner funnel fitted with a medium porosity filter paper. Aspirate the sample and retain the water collected for the pH determination in 4.5.6. Dry the sample in an oven maintained at 70-75°C for approximately two hours or until constant weight is obtained. Use this dry sample for the following determinations unless otherwise specified.

4.5.2 Color. Remove a sufficient quantity of sample (for color and dimension) from a well stirred slurry of lead azide obtained in 4.4.3.1 and spread over an area of four sq. cm. on a glass microscope slide. Allow to air dry. Under reflected light, examine the material on the slide for color and impurities using a magnification of approximately 300 times (300X).

4.5.3 Dimension. (for Type I only). Examine the slide prepared in 4.5.2 using a minimum magnification of 150 times and reflected light for presence of needle shaped crystals. Measure the longest dimension of the crystal with the aid of a mechanical stage. For this examination, use transmitted and reflected light and an ocular micrometer which has been calibrated by means of the stage micrometer. Consider the longest dimension to be the distance between the two most remote points of any one crystal. A minimum of 100 crystals shall be examined.

4.5.4 Particle size. (for Type II only).

4.5.4.1 Preparation of sample. Transfer approximately one gm of sample slurry obtained in 4.4.3.1 to a filtering crucible of very fine porosity (Selas Number 3001 or equivalent). Wash the specimen with three 20 mL portions of ethyl alcohol. Aspirate the washed sample until the odor of alcohol can no longer be detected. Use this sample for the particle size determination.

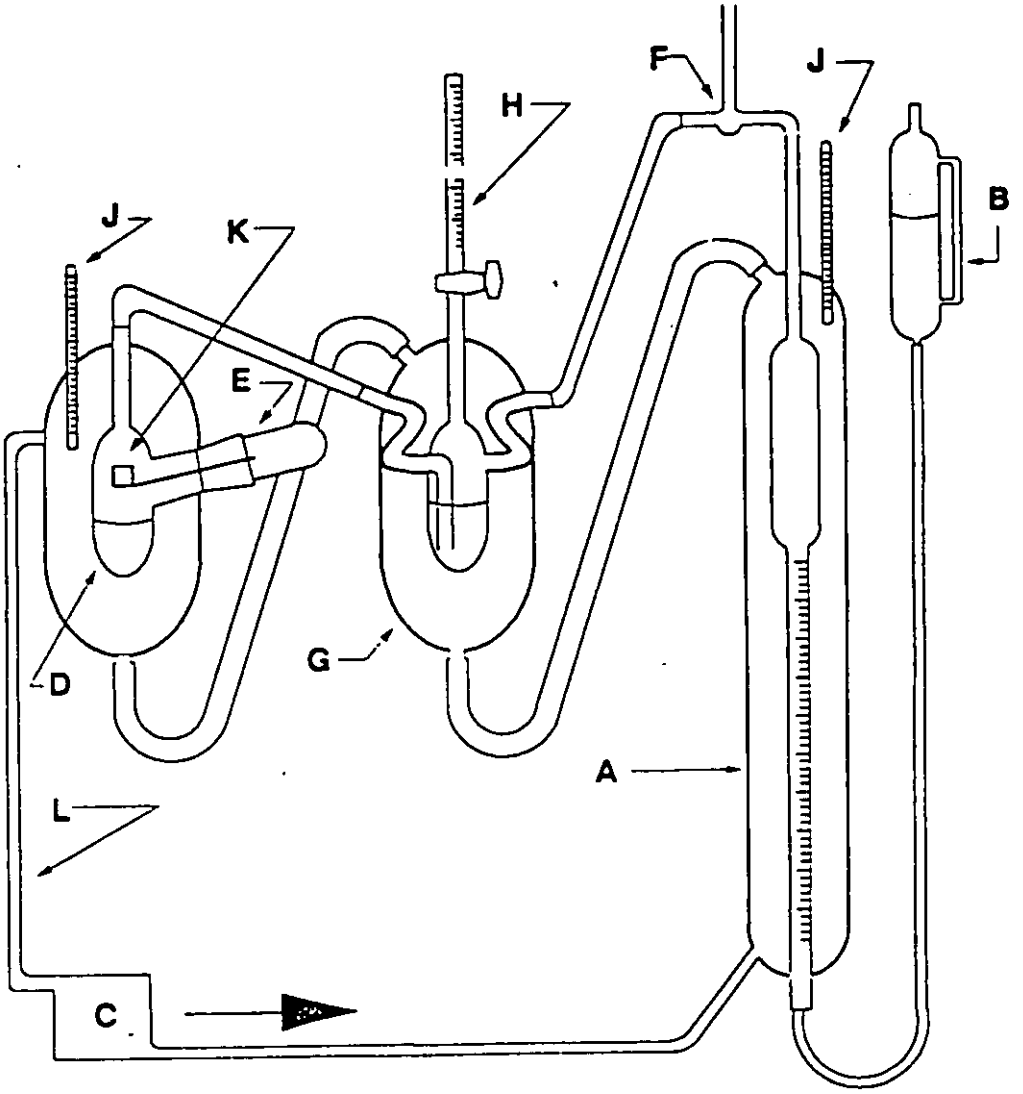
4.5.4.2 Procedure. Determine the particle size using Method 206.1 of MIL-STD-650.

4.5.5. Purity.

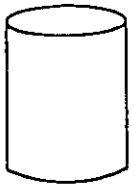
4.5.5.1 Procedure. Determine purity of the lead azide by measuring the nitrogen gas evolved using Method 407.1, MIL-STD-650 (Eudiometer method).

4.5.5.2 Alternate method.

4.5.5.2.1 Apparatus. Assemble the apparatus shown in Figure 1 or equal. Gas burette (A) and leveling bulb (B) are filled with water saturated with nitrogen gas. The circulation



A. Water jacketed 500 mL gas burette, Pyrx
B. Leveling bulb, filled with nitrogen-saturated water, Pyrex
C. Water circulating pump
D. Water jacketed 200 mL reaction flask, Pyrex
E Sample insertion port, ground glass tapered
F. Three-way stop cock, position shown closed to atmosphere
G. Water jacketed 300 mL CO_2 absorption flask, Pyrex
H. 50 mL burette
J. Thermometer
K. Sample holder
L. All connections flexible small bore tubing, such as Tygon



SAMPLE CUP
Diameter: 14mm
Height: 18 mm
Materials: Pyrex glass

FIGURE 1. APPARATUS TO DETERMINE NITROGEN GAS EVOLUTION