

MIL-M-7866C  
 AMENDMENT-1  
10 August 1981

## MILITARY SPECIFICATION

### MOLYBDENUM DISULFIDE, TECHNICAL, LUBRICATION GRADE

This amendment forms a part of Military Specification MIL-M-7866C dated 11 July 1979, and is approved for use by all Departments and Agencies of the Department of Defense.

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Paragraph 4.4.3: Delete and substitute:

"4.4.3 Water solubles. A 10 g sample of the dried molybdenum disulfide shall be weighed into an 80 by 33 mm single thickness thimble. The thimble shall be placed in the extraction tube of a size B Soxhlet extraction apparatus. One hundred and fifty ml of water shall be added to a previously dried and weighed 250 ml flat bottom extraction flask, and the complete extraction apparatus assembled on an electric hotplate. A blank determination shall be run simultaneously. The extraction of the powder and the blank shall be allowed to continue for 4 hours. The tared flasks shall be placed on a steam bath and evaporated to dryness. The flasks containing the residues shall be removed to an oven maintained at  $107 \pm 3^{\circ}\text{C}$  ( $225 \pm 5^{\circ}\text{F}$ ) for 1 hour, then cooled in a desiccator and weighed.

$$\text{Percent water soluble matter} = \frac{A-B}{W} \times 100$$

Where A = Increase in weight of sample flask  
 B = Increase in weight of blank flask  
 W = Weight of dried sample"

Custodians:

Army - AR  
 Navy - AS  
 Air Force - 68

Preparing activity:

Navy - AS  
 (Project No. 6810-8308)

Review activities:

Army - EA, MI  
 DLA - GS

User activities:

Army - ME

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