Canadian General Standards Board

Office des normes générales du Canada

CGSB

ONGC

3-GP-806a
April 1968

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Avril 1968

CANCELLATION

June 1984

CANADIAN GENERAL STANDARDS BOARD

Standard for

MOLYBDENUM DISULFIDE, POWDER

This standard is hereby cancelled because, as far as can be determined, it is no longer being used.

ANNULATION

Juin 1984

OFFICE DES NORMES GÉNÉRALES DU CANADA

Norme

BISULFURE DE MOLYBDÈNE EN POUDRE

Cette norme est annulée par la présente parce que, dans la mesure où il est possible de le constater, elle n'est plus utilisée.

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CANADA

CANADIAN GOVERNMENT SPECIFICATIONS BOARD

STANDARD

FOR

MOLYBDENUM DISULFIDE, POWDER

Withdrawn/Retirée

3-GP-806a

5 APRIL 1968

SUPERSEDES 3-GP-806
28 JULY 1961

THIS STANDARD APPLIES TO ONE GRADE OF POWDERED MOLYBDENUM DISULFIDE FOR USE AS A LUBRICANT.

DEPARTMENT OF DEFENCE PRODUCTION, OTTAWA, CANADA

15 CENTS

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(Membership at date of approval by the Committee)

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Standards Officer - H. E. Mitton, CGSB

Withdrawn/Retirée

3-GP-806a
5 April 1968
Supersedes 3-GP-806
28 July 1961

CANADIAN GOVERNMENT SPECIFICATIONS BOARD

Standard
for

MOLYBDENUM DISULFIDE, POWDER

1. DEFINITION

1.1 This standard applies to one grade of powdered molybdenum disulfide for use as a lubricant.

1.2 For detailed information on uses, see par. 6.1.

2. APPLICABLE PUBLICATIONS

2.1 The following publications are applicable to this standard:

2.1.1 CGSB 3-GP-0, Methods of Testing Petroleum and Associated Products.

2.1.2 ASTM Standards - Volume 18 (Petroleum Products).

2.2 Reference to the above publications is to the issues in effect on the date of invitation to tender, unless otherwise specified.

3. GENERAL REQUIREMENTS

3.1 The molybdenum disulfide powder shall be of a purity and grade suitable for general lubricating use.

4. DETAIL REQUIREMENTS

NOTE: Requirements contained herein are absolute and not subject to corrections for tolerance of test methods. If multiple determinations are made by the inspection laboratory, average results will be used except for those test methods where repeatability data are given. In those cases, the average value derived from the individual results that agree within the repeatability limits may be used at the discretion of the Inspection Authority provided an indication is given of the total number of results obtained and the number falling outside the repeatability limits. For purposes of determining conformance with each requirement, an observed value shall be rounded off "to the nearest unit" in the last right-hand place of figures used in expressing the limiting value, in accordance with the rounding-off procedure given in ASTM E29, Recommended Practices for Designating Significant Places in Specified Limiting Values.

Withdrawn/Retirée

The molybdenum disulfide shall comply with the following detail requirements:

		Min	Max	3-GP-0 Method
4.1	Total Insoluble Matter, % by wt	-	1.0	43.9
4.2	Molybdenum Disulfide, % by wt	98.5	-	125.1
4.3	Moisture*, % by wt	-	0.7	26.11
4.4	Water Soluble Matter, % by wt	-	0.5	9.4
4.5	Oil Content (acetone extractable), % by wt	-	0.5	117.2
4.6	Particle Size, average, microns	4	10	82.3

4.7 Corrosion of Steel and Copper - When tested as prescribed, the material shall not cause any pitting, etching or heavy staining of polished copper and sandblasted steel surfaces. A slight stain or discoloration will be permitted on steel, and the staining of copper shall not exceed ASTM No. 2 as defined in ASTM D130.

Method 60.29

4.8 Corrosion of Aluminum (Solid Films) - The molybdenum disulfide powder, when applied as a bonded solid film, shall not cause corrosion of an uncoated aluminum panel with which the film is in contact, when tested at elevated temperatures and humidities.

Method 60.31

5. INSPECTION

5.1 Acceptance Tests - Acceptance tests shall consist of tests for all requirements of this standard.

5.2 Sampling - A sample of not less than one-half pound shall be provided for acceptance tests and shall be obtained in accordance with "Grab Sampling" technique of ASTM D270, ignoring any remarks about lumpy solids which are not applicable.

5.3 Testing - The methods of testing shall be those in CGSB 3-GP-0, using the procedure prescribed with each requirement.

6. NOTES

6.1 Intended Uses - The material covered by this standard is intended for general use as a lubricant on surfaces of low- and high-sliding velocities where boundary and extreme-pressure conditions exist. This powder may be used for mixing with oils and greases, and in bonded film lubricant formulations.

6.2 The NATO symbol for the product covered by this standard is S-740.

* Performed on the first sample withdrawn from the container.

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6.3 Related Specifications - At the time of publication, the following document was a corresponding specification (but not necessarily equivalent):

6.3.1 U.S. Military Specification MIL-M-7866B, Molybdenum Disulfide, Technical, Lubrication Grade.

6.4 The publication listed in par. 2.1.1 may be obtained from the Canadian Government Specifications Board.

6.5 The publication listed in par. 2.1.2 may be obtained from the American Society for Testing and Materials, 1916 Race Street, Philadelphia, Pa., 19103, U.S.A.

Withdrawn/Retiree