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Australian STANDARD

Explosive atmospheres

Part 20.2: Material characteristics—Combustible dusts test methods

STANDARDS Australia

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The following are represented on Committee MS-011:

- Australasian Institute of Dangerous Good Consultants
- Australian Industry Group
- Australian Petroleum Production and Exploration Association
- Department of Natural Resources and Mines, Qld
- Engineers Australia
- Gas Energy Australia
- Institute of Electrical Inspectors
- Institute of Instrumentation, Control and Automation Australia
- Institution of Chemical Engineers
- National Electrical and Communications Association
- SafeWork NSW

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Australian Standard®

Explosive atmospheres

Part 20.2: Material characteristics—Combustible dusts test methods

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PREFACE

This Standard was prepared by the Standards Australia Committee MS-011, Classification of Hazardous Areas, to supersede AS/NZS 61241.2.1:2000, *Electrical apparatus for use in the presence of combustible dust*, Part 2.1: *Test methods—Methods for determining the minimum ignition temperatures of dust*, AS/NZS 61241.2.2:2000, *Electrical apparatus for use in the presence of combustible dust*, Part 2.2: *Test methods—Method for determining the electrical resistivity of dust in layers,* and AS/NZS 61241.2.3:2000, *Electrical apparatus for use in the presence of combustible dust*, Part 2.3: *Test methods—Method for determining the minimum ignition energy of dust/air mixtures*.

The objective of this Standard is to describe the test methods for the determination of the characteristics of combustible dusts, including whether the dust is combustible or not, in order to permit the classification of areas where such materials exist to enable the proper selection and installation of equipment for use in the presence of combustible dust. This includes such variables as the dust being in the form of a cloud or layer, the particle size, moisture content, explosibility and ignition temperatures.

This Standard addresses the characteristics of dusts at standard atmospheric conditions, as defined in the Scope.

This Standard does not include pyrophoric substances or inherently explosible materials, such as recognized explosives, propellants (e.g. gunpowder, dynamite), or dusts of explosives and propellants that do not require atmospheric oxygen for combustion.

This Standard is identical with, and has been reproduced from ISO/IEC 80079-20-2:2016, *Explosive atmosphere*—Part 20-2: *Material characteristics—Combustible dusts test methods*

As this Standard is reproduced from an International Standard, the following applies:

(a) In the source text ‘this part of ISO/IEC 80079’ should read ‘this Australian Standard’.

(b) A full point substitutes for a comma when referring to a decimal marker.

There are no normative references in the source document.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the annexes to which they apply. A ‘normative’ annex is an integral part of a Standard, whereas an ‘informative’ annex is only for information and guidance.

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CONTENTS

1 Scope 8
2 Normative references 8
3 Terms and definitions 8
4 Dust sample requirements 9
4.1 Receipt of sample for testing 9
4.2 Characterisation of sample 9
4.3 Preparation of sample 10
4.4 Test conditions 10
5 Combustible dusts and combustible flyings determination 10
5.1 Test sequence 10
5.2 Tests to determine whether material is a combustible dust or combustible flying 10
5.2.1 Visual inspection 10
5.2.2 Determine particle distribution 11
5.2.3 Ignition test in the Hartmann tube 11
5.2.4 Ignition test in the 20-litre sphere 11
6 Procedure for characterisation of combustible dust or combustible flying 11
7 Test methods for determination of whether a material is a combustible dust or a combustible flying 14
7.1 Modified Hartmann tube 14
7.1.1 General 14
7.1.2 Test equipment 14
7.1.3 Test procedure 15
7.2 20-litre sphere 15
7.2.1 General 15
7.2.2 Test equipment 15
7.2.3 Test procedure 16
7.3 Alternative method to 20-litre sphere for small test material quantities 16
7.3.1 General 16
7.3.2 Test equipment 17
7.3.3 Test procedure 17
8 Test methods for combustible dust determinations 17
8.1 MIT of a dust cloud 17
8.1.1 General 17
8.1.2 GG furnace 17
8.1.3 BAM furnace 18
8.2 Test for MIT of dust layer 19
8.2.1 General 19
8.2.2 Heated surface 19
8.2.3 Dust layers 20
8.2.4 Dust layer temperature 20
8.2.5 Ambient temperature measurements 20
8.2.6 Dust layer temperature test method 20
8.2.7 Recording of results 21
8.3 Method for determining minimum ignition energy of dust/air mixtures 22

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