



CSA M422:14
(reaffirmed 2019)

Fire-performance and antistatic requirements for conveyor belting



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***Fire-performance and antistatic
requirements for conveyor belting***



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Preface

This is the third edition of CSA M422, *Fire-performance and antistatic requirements for conveyor belting*. It supersedes the previous editions published in 2012 and 1987.

Changes to this edition include the following:

- a) The test requirements and test methods for belt types A1 and A2 have been modified as follows:
 - i) Clause [3.2.1](#), Flames test – Types A1 and A2 belting have been updated;
 - ii) The following clauses have been restructured:
 - 1) Clause [4.1](#) – Flame test for belt types A1 and A2;
 - 2) Clause [4.2](#) – Flame test for belt types B1-A, B1-B, B2, and C;
 - 3) Clause [4.3](#) – Drum friction test for all belt types;
 - 4) Clause [4.4](#) – Flame propagation test for belt types A1, A2, B1-A, B1-B, and C; and
 - 5) Clause [4.5](#) – Electrical resistance test for all belt types;
 - iii) a new Figure [1](#), “Typical arrangement for flame test for belt type A1 and A2”, has been added; and
 - iv) Figures 1 to 9 in the previous edition have been renumbered to Figures [2](#) to [10](#) in this edition.
- b) Annex [B](#), “Guideline for conformity assessment to CSA M422”, has been added.

CSA Group gratefully acknowledges that the development of this Standard was made possible, in part, by the financial support of the Canadian Association of Administrators of Labour Legislation for Occupational Safety and Health.

This Standard was prepared by the Technical Committee on Fire Resistant Conveyor Belting under the jurisdiction of the Standards Steering Committee on Occupational Health and Safety, and has been formally approved by the Technical Committee.

Notes:

- 1) *Use of the singular does not exclude the plural (and vice versa) when the sense allows.*
- 2) *Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.*
- 3) *This Standard was developed by consensus, which is defined by CSA Policy governing standardization — Code of good practice for standardization as “substantial agreement. Consensus implies much more than a simple majority, but not necessarily unanimity”. It is consistent with this definition that a member may be included in the Technical Committee list and yet not be in full agreement with all clauses of this Standard.*
- 4) *To submit a request for interpretation of this Standard, please send the following information to inquiries@csagroup.org and include “Request for interpretation” in the subject line:*
 - a) *define the problem, making reference to the specific clause, and, where appropriate, include an illustrative sketch;*
 - b) *provide an explanation of circumstances surrounding the actual field condition; and*
 - c) *where possible, phrase the request in such a way that a specific “yes” or “no” answer will address the issue.*

Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization and are available on the Current Standards Activities page at standardsactivities.csa.ca.
- 5) *This Standard is subject to review five years from the date of publication. Suggestions for its improvement will be referred to the appropriate committee. To submit a proposal for change, please send the following information to inquiries@csagroup.org and include “Proposal for change” in the subject line:*
 - a) *Standard designation (number);*
 - b) *relevant clause, table, and/or figure number;*
 - c) *wording of the proposed change; and*
 - d) *rationale for the change.*

CSA M422:14

Fire-performance and antistatic requirements for conveyor belting

1 Scope

1.1

This Standard specifies fire-performance and antistatic requirements for new (unused) conveyor belting for use in any part of a mining or excavation operation that is below the surface.

1.2

This Standard covers fire-performance and antistatic conveyor belting of the following types:

- a) Types A1 and A2 intended for use in explosive atmospheres; and
- b) Types B1-A, B1-B, B2, and C intended for use in non explosive atmospheres.

1.3

This Standard does not cover products of combustion or products of thermal degradation from conveyor belting subjected to fire or heating.

Note: *While the intent of this Standard is to establish a reasonable level of fire-performance for conveyor belting, it is recognized that any conveyor belt material could burn under conditions different from those described in this Standard. Therefore, to ensure a higher level of fire safety, consideration should be given to installation measures such as those listed in Annex A.*

1.4

A guideline for conformity assessment to this Standard is provided in Annex B.

1.5

In CSA standards, “shall” is used to express a requirement, i.e., a provision that the user is obliged to satisfy in order to comply with the standard; “should” is used to express a recommendation or that which is advised but not required; and “may” is used to express an option or that which is permissible within the limits of the standard.

Notes accompanying clauses do not include requirements or alternative requirements; the purpose of a note accompanying a clause is to separate from the text explanatory or informative material.

Notes to tables and figures are considered part of the table or figure and may be written as requirements.

Annexes are designated normative (mandatory) or informative (non-mandatory) to define their application.