B341-18

UN pressure receptacles and multiple-element gas containers for the transport of dangerous goods

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Preface

This is the third edition of CSA B341, *UN pressure receptacles and multiple-element gas containers for the transport of dangerous goods*. It supersedes the previous editions published in 2015 and 2009.

This Standard is one of a series of Standards adopted by reference by the Transportation of Dangerous Goods Regulations. Because the Regulations might adopt this Standard with certain exceptions or additional requirements, they should be consulted to determine where they differ from the requirements of this Standard. Notwithstanding the provisions of this Standard, compliance with the provisions of the *Transportation of Dangerous Goods Act* and the Regulations thereto can call for additional requirements due to particular characteristics or properties of individual dangerous goods. Any requirements of the Transportation of Dangerous Goods Regulations regarding the handling, the offering for transport, and the transportation of dangerous goods in cylinders, spheres, and tubes are to be fully complied with.

It should be emphasized that this Standard was not prepared with the intention of removing existing requirements for specification gas containers authorized by CSA B340; rather, it was developed to incorporate the ISO standards as referenced in the United Nations' *Recommendations on the Transport of Dangerous Goods — Model Regulations*, 19th edition (2015) ("UN Model Regulations") as an optional means of compliance and hence to provide for a broader selection of authorized pressure receptacles and facilitate international transport. The following requirements have been included in this Standard for consistency with North American practice:

a) manufacturers, inspection bodies, periodic inspection and test bodies, and design review agencies need to be registered with Transport Canada;
b) UN pressure receptacles and multiple-element gas containers manufactured in accordance with this Standard are marked with the letters "CAN" to denote the country of approval; and
c) an inspection body is not authorized to delegate its inspection functions to inspectors of the manufacturer.

The Technical Committee on Cylinders, Spheres, and Tubes for the Transportation of Dangerous Goods, which is responsible for this Standard, has maintained close links with Transport Canada to ensure compatibility of the new edition of this Standard with the amended Transportation of Dangerous Goods Regulations. The Technical Committee has also reviewed and made extensive use of the UN Model Regulations. This edition of CSA B341 incorporates numerous amendments and refinements to the previous edition, while retaining the same basic format.

This Standard was prepared by the Technical Committee on Cylinders, Spheres, and Tubes for the Transportation of Dangerous Goods, under the jurisdiction of the Strategic 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*
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   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 within 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.*

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UN pressure receptacles and multiple-element gas containers for the transport of dangerous goods

1 Scope

1.1

This Standard specifies requirements for the design, construction, initial inspection and testing, marking, periodic inspection and testing, and repair of UN pressure receptacles and multiple-element gas containers for the transport of dangerous goods. Annex A specifies the regulatory requirements for the conformity assessment system and registration requirements for manufacturers and inspection bodies. Annex B specifies the regulatory requirements for the conformity assessment system and registration requirements for periodic inspection and test bodies and for repair facilities. Annex C specifies the design approval process for multiple-element gas containers. Tables 1 to 9 provide information on the UN pressure receptacles covered by this Standard.

Note: *It should be noted that compliance with the provisions of the Transportation of Dangerous Goods Act and the Regulations thereto may call for additional requirements due to particular characteristics or properties of individual dangerous goods.*

1.2

In this Standard, “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.

2 Reference publications

This Standard refers to the following publications. For dated references, only the edition cited shall apply. For undated references, the latest edition of the referenced document (including any amendments) shall apply. Where there is an inconsistency between this Standard and a referenced publication other than the *Transportation of Dangerous Goods Act* and its regulations, the requirements of this Standard shall prevail. Users of this Standard should avoid directly applying a referenced publication without carefully considering this Standard’s reference to that publication.

Note: *See Annex E for information on the reference organization.*