

National Standard of Canada

CSA C22.2 No. 62841-2-7:24

***Electric motor-operated hand-held tools, transportable tools
and lawn and garden machinery — Safety — Part 2-7:
Particular requirements for hand-held spray guns
(IEC 62841-2-7:2024, MOD)***

Note: For brevity, this Standard will be referred to as “CSA C22.2 No. 62841-2-7” throughout.

DECEMBER 20, 2024

This national standard is based on publication IEC 62841-2-7, First Edition (2024).

*Prepared by
International Electrotechnical Commission*



Reviewed by



CSA Group
CSA C22.2 No. 62841-2-7:24
First Edition
(IEC 62841-2-7:2024, MOD)



ULSE Inc.
UL 62841-2-7
First Edition

ICS 25.140.20



ANSI/UL 62841-2-7-2024

Commitment for Amendments

This standard is issued jointly by the Canadian Standards Association (operating as “CSA Group”), and ULSE Inc. (ULSE). Comments or proposals for revisions on any part of the standard may be submitted to CSA Group or ULSE at anytime. Revisions to this standard will be made only after processing according to the standards development procedures of CSA Group and ULSE. CSA Group and ULSE will issue revisions to this standard by means of a new edition or revised or additional pages bearing their date of issue.

ISBN 978-1-4883-5420-5 © 2024 Canadian Standards Association

All rights reserved. No part of this publication may be reproduced in any form whatsoever without the prior permission of the publisher.

This Standard is subject to review within five years from the date of publication, and suggestions for its improvement will be referred to the appropriate committee. The technical content of IEC and ISO publications is kept under constant review by IEC and ISO. To submit a proposal for change, please send the following information to inquiries@csagroup.org and include "Proposal for change" in the subject line: Standard designation (number); relevant clause, table, and/or figure number; wording of the proposed change; and rationale for the change.

To purchase CSA Group Standards and related publications, visit CSA Group's Online Store at www.csagroup.org/store/ or call toll-free 1-800-463-6727 or 416-747-4044.

© 2024 ULSE Inc. All rights reserved.

Our Standards for Safety are copyrighted by ULSE Inc. Neither a printed nor electronic copy of a Standard should be altered in any way. All of our Standards and all copyrights, ownerships, and rights regarding those Standards shall remain the sole and exclusive property of ULSE Inc.

This ANSI/UL Standard for Safety consists of the First Edition.

The most recent designation of ANSI/UL 62841-2-7 as an American National Standard (ANSI) occurred on December 20, 2024. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, Title Page (front and back), or the Preface. The National Difference Page and IEC Foreword are also excluded from the ANSI approval of IEC-based standards.

Comments or proposals for revisions on any part of the Standard may be submitted to ULSE at any time. Proposals should be submitted via a Proposal Request in the Collaborative Standards Development System (CSDS) at <https://csds.ul.com>.

For information on ULSE Standards, visit <http://www.shopulstandards.com>, call toll free 1-888-853-3503 or email us at ClientService@shopULStandards.com.

CONTENTS

Preface	5
NATIONAL DIFFERENCES	7
FOREWORD	9
1 Scope	13
2 Normative references	13
3 Terms and definitions	13
4 General requirements	13
5 General conditions for the tests	13
6 Radiation, toxicity and similar hazards	14
7 Classification	14
8 Marking and instructions	14
8.14.1.1 General power tool safety warnings	14
9 Protection against access to live parts	15
10 Starting	15
11 Input and current	15
12 Heating	15
13 Resistance to heat and fire	16
14 Moisture resistance	16
15 Resistance to rusting	16
16 Overload protection of transformers and associated circuits	16
17 Endurance	16
18 Abnormal operation	16
19 Mechanical hazards	17
20 Mechanical strength	17
21 Construction	17
21.35 Dust collection	18
22 Internal wiring	18
23 Components	18
24 Supply connection and external flexible cords	18
25 Terminals for external conductors	18
26 Provision for earthing	18
27 Screws and connections	18
28 Creepage distances, clearances and distances through insulation	18

Annexes

Annex I (informative) Measurement of noise and vibration emissions

I.2 Noise test code (grade 2)	20
I.2.4 Installation and mounting conditions of the power tools during noise tests	20
I.2.5 Operating conditions	20
I.3 Vibration	20
I.3.3.2 Location of measurement	20
I.3.5.1 General	21
I.3.5.3 Operating conditions	21
I.3.6.2 Declaration of the vibration total value	22

Annex K (normative) Battery tools and battery packs

K.11	Input and current	23
------	-------------------------	----

Annex L (normative) Battery tools and battery packs provided with mains connection or non-isolated sources

Bibliography

Preface

This is the harmonized CSA Group and ULSE Standard for Electric Motor-Operated Hand-Held Tools, Transportable Tools and Lawn and Garden Machinery – Safety – Part 2-7: Particular Requirements for Hand-Held Spray Guns. It is the First edition of CSA C22.2 No. 62841-2-7 and the First edition of UL 62841-2-7.

This harmonized standard is based on IEC Publication 62841-2-7: First edition, Electric Motor-Operated Hand-Held Tools, Transportable Tools and Lawn and Garden Machinery – Safety – Part 2-7: Particular Requirements for Hand-Held Spray Guns, issued April 2024. IEC 62841-2-7 is copyrighted by the IEC.

This harmonized standard was prepared by CSA Group and ULSE. The efforts and support of the International Harmonization Committee (IHC) for the adoption of the IEC series of standards for Hand-Held, Motor-Operated, and Transportable Tools and Lawn and Garden Machinery, are gratefully acknowledged.

This standard is considered suitable for use for conformity assessment within the stated scope of the standard.

This standard was reviewed by the CSA Subcommittee on Safety of Hand-Held Motor-Operated Electric Tools, under the jurisdiction of the CSA Technical Committee on Consumer and Commercial Products and the CSA Strategic Steering Committee on requirements for Electrical Safety, and has been formally approved by the CSA Technical Committee. This standard has been developed in compliance with Standards Council of Canada requirements for National Standards of Canada. It has been published as a National Standard of Canada by CSA Group.

Application of Standard

Where reference is made to a specific number of samples to be tested, the specified number is to be considered a minimum quantity.

Note: 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.

CSA C22.2 No. 62841-2-7 is to be used in conjunction with the First edition of CAN/CSA-C22.2 No. 62841-1. The requirements for hand-held spray guns are contained in this Part 2 Standard and CAN/CSA-C22.2 No. 62841-1. Requirements of this Part 2 Standard, where stated, amend the requirements of CAN/CSA-C22.2 No. 62841-1. Where a particular subclause of CAN/CSA-C22.2 No. 62841-1 is not mentioned in CSA C22.2 No. 62841-2-7, the CAN/CSA-C22.2 No. 62841-1 subclause applies.

UL 62841-2-7 is to be used in conjunction with the First edition of UL 62841-1. The requirements for hand-held spray guns are contained in this Part 2 Standard and UL 62841-1. Requirements of this Part 2 Standard, where stated, amend the requirements of UL 62841-1. Where a particular subclause of UL 62841-1 is not mentioned in UL 62841-2-7, the UL 62841-1 subclause applies.

Level of harmonization

This standard adopts the IEC text with national differences.

This standard is published as an equivalent standard for CSA Group and ULSE.

An equivalent standard is a standard that is substantially the same in technical content, except as follows: Technical national differences are allowed for codes and governmental regulations as well as those recognized as being in accordance with NAFTA Article 905, for example, because of fundamental climatic,

geographical, technological, or infrastructural factors, scientific justification, or the level of protection that the country considers appropriate. Presentation is word for word except for editorial changes.

All national differences from the IEC text are included in the CSA Group and ULSE versions of the standard. While the technical content is the same in each organization's version, the format and presentation may differ.

Reasons for Differences From IEC

National differences from the IEC are being added in order to address safety and regulatory situations present in the US and Canada.

Interpretations

The interpretation by the standards development organization of an identical or equivalent standard is based on the literal text to determine compliance with the standard in accordance with the procedural rules of the standards development organization. If more than one interpretation of the literal text has been identified, a revision is to be proposed as soon as possible to each of the standards development organizations to more accurately reflect the intent.

IEC Copyright

For CSA Group, the text, figures, and tables of International Electrotechnical Commission Publication 62841-2-7, Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 2-7: Particular requirements for hand-held spray guns, copyright 2024, are used in this standard with the consent of the International Electrotechnical Commission. The IEC Foreword is not a part of the requirements of this standard but are included for information purposes only.

These materials are subject to copyright claims of IEC and ULSE. No part of this publication may be reproduced in any form, including an electronic retrieval system, without the prior written permission of ULSE. All requests pertaining to the Electric Motor-Operated Hand-Held Tools, Transportable Tools and Lawn and Garden Machinery – Safety – Part 2-7: Particular Requirements for Hand-Held Spray Guns, UL 62841-2-7 Standard should be submitted to ULSE.

NATIONAL DIFFERENCES

National Differences from the text of International Electrotechnical Commission (IEC) Publication 62841-2-7, Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 2-7: Particular requirements for hand-held spray guns, copyright 2024, are indicated by notations (differences) and are presented in bold text. The national difference type is included in the body.

There are five types of National Differences as noted below. The difference type is noted on the first line of the National Difference in the standard. The standard may not include all types of these National Differences.

DR – These are National Differences based on the **national regulatory requirements**.

D1 – These are National Differences which are based on **basic safety principles and requirements**, elimination of which would compromise safety for consumers and users of products.

D2 – These are National Differences from IEC requirements based on existing **safety practices**. These requirements reflect national safety practices, where empirical substantiation (for the IEC or national requirement) is not available or the text has not been included in the IEC standard.

DC – These are National Differences based on the **component standards** and will not be deleted until a particular component standard is harmonized with the IEC component standard.

DE – These are National Differences based on **editorial comments or corrections**.

Each national difference contains a description of what the national difference entails. Typically one of the following words is used to explain how the text of the national difference is to be applied to the base IEC text:

Addition / Add - An addition entails adding a complete new numbered clause, subclause, table, figure, or annex. Addition is not meant to include adding select words to the base IEC text.

Modification / Modify - A modification is an altering of the existing base IEC text such as the addition, replacement or deletion of certain words or the replacement of an entire clause, subclause, table, figure, or annex of the base IEC text.

Deletion / Delete - A deletion entails complete deletion of an entire numbered clause, subclause, table, figure, or annex without any replacement text.

No Text on This Page