IEC 62561-7

Edition 3.0 2024-02
REDLINE VERSION

INTERNATIONAL STANDARD

colour inside

Lightning protection system components (LPSC) – Part 7: Requirements for earthing enhancing compounds

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 29.020, 91.120.40

ISBN 978-2-8322-8353-0

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LIGHTNING PROTECTION SYSTEM COMPONENTS (LPSC) –

Part 7: Requirements for earthing enhancing compounds

FOREWORD

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This redline version of the official IEC Standard allows the user to identify the changes made to the previous edition IEC 62561-7:2018. A vertical bar appears in the margin wherever a change has been made. Additions are in green text, deletions are in strikethrough red text.

IEC 62561-7 has been prepared by IEC technical committee 81: Lightning protection. It is an International Standard.

This third edition cancels and replaces the second edition published in 2018. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) Figure A.1 has been replaced with a simpler one that clearly shows the high and low corrosion load limits of the earth enhancing compounds without the need for special knowledge;
b) pH measurement has been introduced.

The text of this International Standard is based on the following documents:

Draft	Report on voting
81/755/FDIS	81/761/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

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INTRODUCTION

This part of IEC 62561 deals with the requirements and tests for earthing enhancing compounds used as lightning protection system components (LPSC) designed and implemented in accordance with the IEC 62305 series.

LIGHTNING PROTECTION SYSTEM COMPONENTS (LPSC) –

Part 7: Requirements for earthing enhancing compounds

1 Scope

This part of IEC 62561 specifies the requirements and tests for earthing enhancing compounds producing low resistance of an earth termination system.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 4689-3, *Iron ores – Determination of sulfur content – Part 3: Combustion/infrared method*

~~ISO 14869-1, *Soil quality – Dissolution for the determination of total element content – Part 1: Dissolution with hydrofluoric and perchloric acids*~~

EN 12457-2, *Characterisation of waste – Leaching – Compliance test for leaching of granular waste materials and sludges – Part 2: One stage batch test at a liquid to solid ratio of 10 l/kg for materials with particle size below 4 mm (without or with size reduction)*

~~EN 16192, *Characterization of waste – analysis of eluates*~~

CEN/TR 16192, *Waste – Guidance on analysis of eluates*

~~ASTM G57-06, *Standard Test Method for Field Measurement of Soil Resistivity, Using the Wenner, Four-Electrode Method*~~

ASTM G57-20, *Standard Test Method for Measurement of Soil Resistivity Using the Wenner Four-Electrode Method*

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Edition 3.0 2024-02

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Lightning protection system components (LPSC) – Part 7: Requirements for earthing enhancing compounds

Composants des systèmes de protection contre la foudre (CSPF) – Partie 7: Exigences pour les enrichisseurs de terre

IEC 62561-7:2024-02(en-fr)

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COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

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COMPOSANTS DES SYSTÈMES DE PROTECTION CONTRE LA FOUDRE (CSPF) –

Partie 7: Exigences pour les enrichisseurs de terre

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L'IEC 62561-7 a été établie par le comité d'études 81 de l'IEC: Protection contre la foudre. Il s'agit d'une Norme internationale.

Cette troisième édition annule et remplace la deuxième édition parue en 2018. Cette édition constitue une révision technique.

Cette édition inclut les modifications techniques majeures suivantes par rapport à l'édition précédente:

a) la Figure A.1 a été remplacée par une figure plus simple, qui indique clairement les limites haute et basse de la force corrosive des enrichisseurs de terre sans nécessiter aucune connaissance particulière;

b) le mesurage du pH a été ajouté.

Le texte de cette Norme internationale est issu des documents suivants:

Projet	Rapport de vote
81/755/FDIS	81/761/RVD

Le rapport de vote indiqué dans le tableau ci-dessus donne toute information sur le vote ayant abouti à son approbation.

La langue employée pour l'élaboration de cette Norme internationale est l'anglais.

Ce document a été rédigé selon les Directives ISO/IEC, Partie 2, il a été développé selon les Directives ISO/IEC, Partie 1 et les Directives ISO/IEC, Supplément IEC, disponibles sous www.iec.ch/members_experts/refdocs. Les principaux types de documents développés par l'IEC sont décrits plus en détail sous www.iec.ch/publications.

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INTRODUCTION

La présente partie de l'IEC 62561 spécifie les exigences et les essais pour les enrichisseurs de terre utilisés comme composants des systèmes de protection contre la foudre (CSPF) conçus et mis en œuvre conformément à la série IEC 62305.

COMPOSANTS DES SYSTÈMES DE PROTECTION CONTRE LA FOUDRE (CSPF) –

Partie 7: Exigences pour les enrichisseurs de terre

1 Domaine d'application

La présente partie de l'IEC 62561 spécifie les exigences et les essais pour les enrichisseurs de terre qui génèrent une faible résistance d'un réseau de prises de terre.

2 Références normatives

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ISO 4689-3, *Minerais de fer – Dosage du soufre – Partie 3: Méthode par combustion et infrarouge*

EN 12457-2, *Caractérisation des déchets – Lixiviation – Essai de conformité pour la lixiviation des déchets fragmentés et des boues – Partie 2: Essai en bâchée unique avec un rapport liquide-solide de 10 l/kg et une granularité inférieure à 4 mm (sans ou avec réduction de la granularité)*

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