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SOUTH AFRICAN NATIONAL STANDARD

Avoidance of hazards underground in collieries due to lightning

WARNING

**This document references other
documents normatively.**

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Table of changes

Change No.	Date	Scope
Amdt 1	2015	Amended to change the designation of SABS standards to SANS standards, and to move references to legislation, to national bodies and to a publication by a national body to the foreword.

Acknowledgement

The SABS Standards Division wishes to acknowledge the valuable information given by the Coal Mining Industry.

Foreword

This South African standard was approved by National Committee SABS/TC 065, *Explosion prevention*, in accordance with procedures of the SABS Standards Division, in compliance with annex 3 of the WTO/TBT agreement.

This document was approved for publication in November 2015.

This document supersedes SABS 0347:2002 (edition 1).

A vertical line in the margin shows where the text has been technically modified by amendment No. 1.

Reference is made in 5.1.2 and in 5.3(b) to "the relevant national legislation". In South Africa this means the Mine Health and Safety Act, 1996 (Act No. 29 of 1996). **Amdt 1**

Reference is made in 5.2.4 to "the relevant national mine safety code". In South Africa this means the Chamber of Mines' Safety Code. **Amdt 1**

Reference is made in 5.3(b) to "the relevant national research body". In South Africa this means the Council for Scientific and Industrial Research (CSIR). **Amdt 1**

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Avoidance of hazards underground in collieries due to lightning

1 Scope

This code of practice is intended to assist in the elimination of risks from lightning in underground collieries.

2 Normative references

The following standard contains provisions which, through references in the text, constitute provisions of the standard. All standards are subject to revision and, since any reference to a standard is deemed to be a reference to the latest edition of that standard, parties to agreements based on this standard are encouraged to take steps to ensure the use of the most recent edition of the standard indicated below. Information on currently valid national and international standards may be obtained from the SABS Standards Division.

SANS 10313, *Protection against lightning – Physical damage to structures and life hazard.*

3 Definitions

For the purposes of this standard, the following definition applies.

bonding

connecting together of separate metal items to prevent the occurrence of potential differences between such items. The risk of sparking between them, or of an electric shock being received by a person touching one, or both such items, is thereby eliminated

4 Risks arising from lightning

4.1 Explosions

The greatest risks from lightning in underground collieries are the ignition of methane accumulations and the premature ignition of explosives.