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**SANS 10086-1:2014**

Edition 4.1

## **SOUTH AFRICAN NATIONAL STANDARD**

**The installation, inspection and maintenance  
of equipment used in explosive atmospheres**

**Part 1: Installations including surface  
installations on mines**

**WARNING**

**This document references other  
documents normatively.**

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**Table of changes**

<b>Change No.</b>	<b>Date</b>	<b>Scope</b>
Amdt 1	2014	Amended to reinsert omitted clauses, and to clarify the information in annex A.

**Foreword**

This South African standard was approved by National Committee SABS/TC 65, *Explosion prevention*, in accordance with procedures of the SABS Standards Division, in compliance with annex 3 of the WTO/TBT agreement.

This document was published in June 2014.

This document supersedes SANS 10086-1:2011 (edition 4).

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

**This document is referenced in the Labour Relations Act, 1995 (Act No. 66 of 1995), the Local Government: Municipal Systems Act, 2000 (Act No. 32 of 2000), and the Constitution of the Republic of South Africa, 1996 (Act No. 108 of 1996).**

In this part of SANS 10086, reference is made to national legislation. In South Africa, the following legislation and authorities are responsible for the control of hazardous locations:

- a) the Mine Health and Safety Act, 1996 (Act No. 29 of 1996), administered by the Chief Inspector of Mines, of the Department of Mineral Resources and Department of Energy;
- b) the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993), administered by the Chief Inspector of Occupational Health and Safety, of the Department of Labour;
- c) the Explosives Act, 2003 (Act No. 15 of 2003), administered by the Chief Inspector of Explosives, of the Department of Labour.

In South Africa, it is required that the test laboratory referred to in this part of SANS 10086 be an approved test laboratory (ATL).

SANS 10086 consists of the following parts under the general title *The installation, inspection and maintenance of equipment used in explosive atmospheres*:

*Part 1: Installations including surface installations on mines.*

*Part 2: Electrical equipment installed underground in mines.*

*Part 3: Repair and overhaul of equipment.*

Annex A forms an integral part of this document.

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## **The installation, inspection and maintenance of equipment used in explosive atmospheres**

### **Part 1:**

Installations including surface installations on mines

## **1 Scope**

**1.1** This part of SANS 10086 covers the installation, inspection and maintenance of electrical or mechanical apparatus (or both) to be used in surface installations including surface installations on mines, in atmospheres that might be explosive because of the presence of gases, vapours, mist, dust, or fibres that are flammable in the presence of atmospheric oxygen.

**1.2** This part of SANS 10086 does not cover the risks that arise from the toxicity of flammable substances or their reaction products, nor does it cover explosives.

**1.3** Mining applications are covered in SANS 10086-2.

## **2 Normative references**

The following referenced documents are indispensable for the application 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. Information on currently valid national and international standards can be obtained from the SABS Standards Division.

ARP 0108, *Regulatory requirements for explosion-protected apparatus.*

SANS 10086-2, *The installation, inspection and maintenance of equipment used in explosive atmospheres – Part 2: Electrical equipment installed underground in mines.*

SANS 10086-3, *The installation, inspection and maintenance of equipment used in explosive atmospheres – Part 3: Repair and overhaul of equipment*

SANS 10108, *The classification of hazardous locations and the selection of apparatus for use in such locations.*

SANS 10142-1, *The wiring of premises – Part 1: Low-voltage installations.*

SANS 60079-10-1/IEC 60079-10-1, *Explosive atmospheres – Part 10-1: Classification of areas – Explosive gas atmospheres.*

**Amdt 1**