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**SANS 60079-20-1:2010**

Edition 1 and IEC corr .1

**IEC 60079-20-1:2010**

Edition 1 and corr.1

## **SOUTH AFRICAN NATIONAL STANDARD**

### **Explosive atmospheres**

### **Part 20-1: Material characteristics for gas and vapour classification — Test methods and data**

This national standard is the identical implementation of IEC 60079-20-1:2010 and corrigendum 1, and is adopted with the permission of the International Electrotechnical Commission.

**WARNING**  
This standard references other  
documents normatively.

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**Table of changes**

<b>Change No.</b>	<b>Date</b>	<b>Scope</b>
IEC corr. 1	2012	Corrected to update information on classification according to MESH and MIC, classification of temperature class and range of auto-ignition temperatures (table 1), and to replace in the row for <i>CAS-No 75-29-6</i> the tabulated value for MESH and in the row for <i>CAS-No. 107-31-3</i> the tabulated value for temperature class in the annex on tabulated values (annex B).

**National foreword**

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

This SANS was published in May 2014.

This SANS document supersedes SANS 60079-20-1:2010 (edition 1).

IEC 60079-20-1  
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CORRIGENDUM 1

4.4 Classification according to MESG and MIC

Replace the existing second and third paragraphs by the following:

One determination is adequate when:

- Group IIA:  $MESG \geq 0,9$  mm, or  $MIC > 0,9$ ;
- Group IIB:  $0,55$  mm  $\leq$   $MESG < 0,9$  mm, or  $0,5 \leq MIC \leq 0,8$ ;
- Group IIC:  $MESG < 0,5$  mm, or  $MIC < 0,45$ .

Determination of both the MESG and MIC ratio is required when:

- for IIA:  $0,8 \leq MIC \leq 0,9$  need to confirm by MESG;
- for IIB:  $0,45 \leq MIC \leq 0,5$  need to confirm by MESG;
- for IIC:  $0,5 \leq MESG < 0,55$  need to confirm by MIC;

Table 1 – Classification of temperature class and range of auto-ignition temperatures

Replace the first row of Table 1 by the following:

Temperature class	Range of auto-ignition temperature (AIT) °C
T1	> 450

Annex B – Tabulated values

Replace in the row for CAS-No.75-29-6 the tabulated value for MESG and in the row for CAS-No. 107-31-3 the tabulated value for temp. class, as follows:

CAS- No.	Name formula	MESG [mm]	Temp. class
75-29-6	2-Chloropropane (CH <sub>3</sub> ) <sub>2</sub> CHCl	1,23	T1
107-31-3	Formic acid methyl ester (= Methyl formate) (= Methyl methanoate) HCOOCH <sub>3</sub>	0,94	T1





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# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

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