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SOUTH AFRICAN NATIONAL STANDARD

The selection, use and maintenance of respiratory protective equipment

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1 Dr Lategan Road Groenkloof ✉ Private Bag X191 Pretoria 0001
Tel: +27 12 428 7911 Fax: +27 12 344 1568
www.sabs.co.za

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Table of changes

Change No.	Date	Scope
Amdt 1	2003	Amended to remove reference to a withdrawn standard, to add a definition for "light metals" and to renumber the remaining definitions accordingly, to add a description regarding emergency type respiratory protective equipment, to update the material requirements for respirators for use in flammable or explosive atmospheres, to delete reference to certain suitable alloys, to include reference to the marking of type and class on filters and to update referenced standards
Amdt 2	2010	Amended to move reference to legislation to the foreword and to update referenced standards.

Acknowledgement

The SABS Standards Division wishes to acknowledge the valuable assistance derived from publications of the following organizations:

British Standards Institution (UK)

Standards Association of Australia

Foreword

This South African standard was approved by National Committee SABS SC 94 B, *Personal protective equipment – Respiratory equipment*, in accordance with procedures of the SABS Standards Division, in compliance with annex 3 of the WTO/TBT agreement.

This document was published in October 2010.

This document supersedes SANS 10220:2003 (edition 1.1).

A vertical line in the margin shows where the text has been technically modified by amendment No. 2.

Reference is made in 2.19 to "the relevant national legislation". In South Africa this means the Minerals Act, 1991 (Act No. 50 of 1991).

Preface

In this standard, a nominal protection factor has been suggested for each type of respiratory protective device. This factor is explained in appendix B, and is a guide to the effectiveness of the device when used correctly. It indicates the degree by which the respiratory equipment reduces the atmospheric contaminant within the breathing zone. Thus, a device which reduces the level of contamination 10 times will have a nominal protection factor of 10 and one which reduces it 1 000 times will have a nominal protection factor of 1 000. These figures should be used in conjunction with the maximum allowable concentration, or threshold limit value, of the contaminant and its actual concentration in the atmosphere. Generally, a substance with a threshold limit value of 10 parts per million, which has a concentration of 1 000 parts per million in the atmosphere, will require the use of equipment with a nominal protection factor of at least 100.

Preface (*concluded*)

Further examples are given in table B.1 and appendix E.1, together with a list of respirators and their nominal protection factors.

Each type of device is dealt with in more detail in the following pages, and it is advisable to read all of this standard before selecting the appropriate respiratory protective device for use in a given situation. Further details can be obtained from other South African National Standards and European Standards referred to in the text (see appendix A), but if the reader is in doubt about any part of the standard, further explanation and guidance may be obtained from the appropriate authority or from the manufacturer of the equipment.

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