Australian Standard®

Methods for the sampling and analysis of indoor air

Method 2: Determination of carbon monoxide—Direct-reading portable instrument method

PREFACE

This Standard was prepared by the Standards Australia Committee on Methods for Examination of Air as a further part of the AS 2365 series on indoor air sampling and analysis.

METHOD

1 SCOPE This Standard sets out a direct-reading portable instrument method for the determination of carbon monoxide in indoor air at concentrations between 1 p.p.m. and 500 p.p.m. (by volume of air). Where a portable instrument is unavailable, the sample collection procedure described in AS 3580.7.1 may be used.

2 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS
3580 Methods for sampling and analysis of ambient air
3580.2.2 Method 2.2: Preparation of reference test atmospheres—Compressed gas method
3580.4.1 Method 4.1: Determination of sulfur dioxide—Direct-reading instrumental method
3580.7.1 Method 7.1: Determination of carbon monoxide—Direct-reading instrumental method

3 DEFINITIONS For the purpose of this Standard, the definitions in AS 3580.4.1 and those below apply.

3.1 Breathing zone—a hemisphere of 300 mm radius extending in front of the face and measured from the midpoint of a line joining the ears.

3.2 Indoor air—air within a building occupied for a period of at least 1 h per day. Buildings covered by the definition include homes, schools, restaurants, public buildings, residential institutions (including hostels, hotels, hospitals), and offices but the definition does not cover premises, e.g. workplaces, or parts of premises otherwise covered by occupational health standards.

4 PRINCIPLE An air sample diffuses or is drawn into a direct-reading instrument. A response is produced which is proportional to the concentration of carbon monoxide in the air sampled.