

*Indian Standard*

## FRUITS AND VEGETABLES — PHYSICAL CONDITIONS IN COLD STORES — DEFINITIONS AND MEASUREMENT

*(First Revision)*

### 0 Introduction

The International Standards which have been prepared, or which are in the course of preparation, concerning conditions which allow fruits and vegetables to be kept well in cold storage, make reference to the Optimum values of physical factors which are used in industrial practice : temperature, relative humidity, air-circulation ratio, rate of air Change.

Storage practice has shown that the definitions of these physical factors need either to be made clear or to be repeated in Order to avoid frequent confusion (for example, between the temperature applied to the produce and that of the atmosphere in the store, or between the air-circulation ratio and the rate of air Change).

This International Standard draws attention to valid methods of measuring the physical factors concerned and renders it unnecessary to repeat systematically the definitions of these factors in each International Standard, which would have the effect of enlarging considerably each text intended for the users of International Standards on the storage of produce of plant origin.

Finally, it has appeared essential to inform users about the difficulties which arise in measuring certain physical factors.

The International Standards concerning the cold storage of fruits and vegetables, which have inspired this document, are intended for cold-storage users. To facilitate their task, it has sometimes been found necessary to adopt in this text definitions which, without being absolutely scientifically rigorous, provide values which are sufficiently accurate and easy to use.

### 1 Scope and field of application

This International Standard gives definitions of the physical factors usually employed in the industrial cold storage of fruits and vegetables (temperature, relative humidity, air-circulation ratio, rate of air Change, etc.), and provides useful information concerning their measurement.