
International Standard



6770

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Instant tea — Determination of free-flow and compacted bulk densities

Thé soluble — Détermination de la masse volumique sans tassement et après tassement

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Foreword

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Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 6770 was developed by Technical Committee ISO/TC 34, *Agricultural food products*, and was circulated to the member bodies in March 1981.

It has been approved by the member bodies of the following countries :

Australia	Iraq	South Africa, Rep. of
Austria	Israel	Spain
Chile	Kenya	Sri Lanka
Czechoslovakia	Korea, Rep. of	Switzerland
Egypt, Arab Rep. of	Netherlands	Tanzania
France	New Zealand	United Kingdom
Germany, F. R.	Peru	USA
Hungary	Philippines	USSR
India	Romania	Yugoslavia

No member body expressed disapproval of the document.

Instant tea — Determination of free-flow and compacted bulk densities

0 Introduction

A knowledge of the bulk density of instant tea is essential to trade in that commodity for it determines the volume occupied by a given mass and hence is an important factor in filling jars correctly for retail sale, and for controlling the mass of instant tea delivered from vending machines.

Bulk density is defined as the ratio of mass to volume. The volume of a given sample of instant tea varies according to its history of handling, due to compaction (reversible) and powder breakdown (irreversible) effects. Bulk densities can be expressed in two ways : free-flow (or uncompacted) density and tapped (or compacted) density.

Instant tea is fragile and subject to irreversible powder breakdown effects which may occur with repetitive determination of compacted bulk density. Because both densities (and in particular the compacted density) depend so critically on the methods used for handling, it is particularly important that the methods adopted for their measurement be as simple and as

little dependent on the human factor as possible. It is also important that any mechanical apparatus needed is standardized, cheap, and easily available throughout those parts of the world where instant tea is produced or sold.

1 Scope and field of application

This International Standard specifies two methods for the determination of the bulk density of instant tea :

- a) free-flow bulk density (section one);
- b) compacted bulk density (section two).

2 Reference

ISO 787/11, *General methods of test for pigments and extenders — Part 11 : Determination of tamped volume and apparent density after tamping.*