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Dental brazing investments

Revêtements dentaires pour le brasage



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 11244 was prepared by Technical Committee ISO/TC 106, *Dentistry*, Subcommittee SC 2, *Prosthetic materials*.

Annex A of this International Standard is for information only.

Dental brazing investments

1 Scope

This International Standard establishes a classification of and specifies requirements for dental brazing investments. It specifies test methods to be used to determine compliance with these requirements. It lists information which shall be included in the manufacturer's instructions and also gives requirements for labelling.

2 Definitions

For the purposes of this International Standard, the following definitions apply.

2.1

brazing

brazing process

process of joining generally applied to metals in which, during or after heating, molten filler metal is drawn into or retained in the space between closely adjacent surfaces of the parts to be joined by capillary attraction

NOTE In general the melting range of the filler metal is above 450 °C, but always below the melting temperature of the parent metal.

2.2

brazing investment

blend of refractory fillers and binding system specially designed to allow the formation of a model on which dental restoration components are held in place while they are being joined by brazing

2.3

gypsum-bonded dental brazing investment

refractory filler system and binding system consisting essentially of calcium sulfate hemihydrate, specially designed for use when brazing dental alloy restorations

2.4

phosphate-bonded dental brazing investment

refractory filler system and binding system consisting essentially of an acidic phosphate (such as monoammonium phosphate) and a basic oxide (such as magnesium oxide) specially designed for use when brazing dental alloy restorations

2.5

special liquid

liquid, consisting mainly of a suspension of colloidal silica particles in water, made available by the manufacturer or supplier for mixing with the brazing investment powder for the purpose of increasing thermal expansion

3 Classification

Dental brazing investments are classified into two types according to their composition.

- **Type 1:** Gypsum-bonded dental brazing investments.
- **Type 2:** Phosphate-bonded dental brazing investments.