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DENTAL WAXES

In the dental field, the term waxes, covers a variety of products of a thermic plastic nature for all those uses where there is a necessity for a material that is soft and easy to model but that becomes rigid and stable with cooling. The composition of the waxes is generally a mixture of the following:

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|-------------------------|---|
| natural waxes: | mineral: paraffin, ceresin, etc. vegetable: carnauba, cocoa butter |
| synthetic waxes: | hydrogenates, etc. |
| animal waxes: | bees wax |
| additives: | stearic acid, turpentine, colourants. |

GENERAL CHARACTERISTICS OF THE WAXES

We will briefly analyse all the properties that are of considerable importance with regard to the manipulation and therefore the use of the waxes.

Transformation temperature:

this is the initial step that the wax undergoes when heated, passing from a crystalline state to other molecular states, thus giving the product that natural plasticity which is indispensable to the operator.

Thermic dilation:

this is a highly dangerous phenomenon that varies with the differences in the composition and temperature of the wax. Thermic dilation is defined as dangerous when during cooling it causes contractions and therefore internal strains which could generate distortions.

Mechanical properties:

elasticity, hardness, etc.



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Viscous fluidity:

this is reasonably important, it varies according to the working temperature and the molecular structure of the wax.

Internal tension:

this is what causes most distortions in the wax, it can be avoided by working the wax at a high temperature or by pre-heating the model or dies.

CLASSIFICATION OF THE WAXES

Dental waxes are classified according to their use:

| | |
|--------------------------|---|
| modelling waxes: | for inlays for casting for baseplates |
| working waxes: | for boxing for utility use for adhesive use |
| impression waxes: | for corrective uses for registration |

According to the new directives to the law "Medical Devices 93/42", the following categories of wax have to be considered as "Class I" and therefore to be marked with CE with auto-certification:

BASEPLATES WAXES

BOXING WAXES

ORTO WAX

IMPRESSIONS WAXES

We recommend to storage the products in dry, cool and away from heat place.