



*Chromo-Speed is a high-quality, phosphate-bonded investment, which meets all requirements in chrome cobalt work.*

*Chromo-Speed produces accurately fitting chrome cobalt castings and smooth surfaces with minimum effort. The expansion is adapted to the different expansion requirements using the liquid.*

**The liquid is the same as that used for Dreibettmasse<sup>®</sup> and so reduces stock-keeping.**

#### *Duplicating:*

*We recommend Rio or Turbosil for duplicating. Neither of the two duplicating silicones contains extenders, therefore ensuring maximum elastic recovery and a perfect fit when used in combination with Chromo-Speed. Rio and Turbosil are suitable for duplicating in flasks or flask-free systems. Chromo-Speed is suitable for use with silicone and gel duplicating moulds.*

*Chromo-Speed can either be used in the speed cast technique or programme-heated.*

#### **Storage:**

The temperature of the powder and liquid greatly influences the working time and setting expansion with phosphate-bonded investments. A constant storage temperature is therefore important to ensure reproducible fitting results. We recommend storing the powder and liquid in a conditioning cabinet at 20°C. Storage in a refrigerator is not recommended, as the setting and expansion behaviour can change at temperatures below 16°C. The liquid must be protected against frost and should not exhibit any crystallization layer in the bottle.

#### **Mixing:**

Use a separate mixing bowl for phosphate-bonded investment. To ensure consistent mixing conditions rinse the mixing bowl with water, dry and add the measured liquid (see back page for concentration recommendations). Sprinkle in Chromo-Speed and thoroughly spatulate for 20 sec. Then mix for 60 sec. under vacuum and hold for a further 10 sec. under vacuum without mixing.

Note: Chromo-Speed contains quartz and cristobalite. Inhalation of the dust must be avoided!

#### **Pouring and investing**

Silicone moulds should be sprayed with Relax wetting agent before pouring to guarantee bubble-free flow of the investment. During pouring ensure that the silicone or gel does not become loosened from the flask. The model can be removed from the duplicating mould after 30 min. To improve degassing, trim the top and bottom of the mould before placing it in the furnace.

#### **Speed casting:**

The mould should be placed in a furnace preheated to 900 to 950°C thirty minutes after pouring. The mould should either be placed with the sprue hole facing down on a grid tray or leaned against a suitable mould holder at a 45° angle so that the wax can flow out unhindered. In the case of furnaces with floor heating there must be a minimum distance of 1 cm between the mould and base plate.

The furnace door must not be opened in the first 15 min., as there is the risk of explosion! The recommended furnace temperatures can be found in the alloy manufacturer's instructions. The mould must be held at the final temperature for a minimum of 60 min. The preheat time should be increased by 15 min. for each additional mould in the furnace.

**Programmed heating:**

Place the mould in the furnace after it has set and cooled and heat at a heat rate of approx. 5°C /min. A hold time of 30 minutes should be maintained at 300°C and 600°C respectively. Hold the mould at the final temperature for a minimum of 45 min. before casting.

**Mixing ratio:**

Silicone duplication: 100 g powder : 20 ml liquid  
Gel duplication: 100 g powder : 18 ml liquid

**Recommended concentrations:**

Clasp-retained CrCo denture base: 70 – 80 %  
Fixed-removable restorations: 70 – 80 %  
One-piece castings: 85 – 100 %  
Investing: 50 – 70 %  
Only distilled water should be used for diluting the liquid.

**Mixing times:**

Premix for 20 sec. manually  
Mix for 60 sec. under vacuum  
Hold the vacuum for a further 10 sec.

**Setting time in the duplicating mould:**

30 min.

**Speed casting:**

Place the mould in the furnace 30 min. after pouring; roughen the mould.

**Preheat temperature:**

900°C – 950°C