uniVest Plus
Phosphate bonded precision investment (graphite-free) for all precious alloys and non precious bonding alloys. Not recommended for casting partial frames.

1. Expansion
The total expansion can be adjusted by selective dilution of the liquid. The liquid is supplied in 100 % concentration and should be diluted according to the type of alloy to be cast either with distilled or demineralised water.

2. Mixing ratio
The powder and the liquid are always mixed in a ratio of 100 g : 24 ml (casting rings: 1 x = 50 g : 12 ml / 3 x = 150 g : 36 ml / 6 x = 300 g : 72 ml).

2.1 Recommended liquid concentrations

<table>
<thead>
<tr>
<th>Vol. %</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>– Conventional C&amp;B gold alloys</td>
<td>40 to 50 %</td>
</tr>
<tr>
<td>– Precious bonding alloys and white alloys</td>
<td>65 to 75 %</td>
</tr>
<tr>
<td>– Non precious bonding alloys</td>
<td>90 to 100 %</td>
</tr>
</tbody>
</table>

Note: Maximum expansion (3.8 %) is obtained with the non-diluted liquid.

3. Mixing
Prepare the liquid according to the indicated concentration, add the powder, then spatulate for a short time. Finish mixing mechanically under vacuum for about 60–90 seconds.

4. Preparation for investing
The uniVest Plus investment can be used with or without (size 1 x and 3 x) metallic casting ring. Whether a metal casting ring or a rigid plastic form is used, always apply a ring-liner. With large diameter casting rings, we recommend that the inside of the casting ring be lined with a double layer of flask-liner to allow free expansion. Fill up the casting ring using vibration and allow the investment to set.

| Beginning of setting time | approx. 6 min. |
| End of setting time       | approx. 15 min. at 20–24 °C |
| Beginning of preheating of the casting ring | 60 min. |

The times mentioned are valid for room temperature of approx. 20–24 °C.

5. Preheating of the casting ring (ideal rate: 5 °C/min.)
Put the casting ring in the cold furnace. Heat to and stabilise at 200–250 °C for at least 30 to 60 minutes (according to the size of the casting ring). Heat to 600 °C and hold for 30 minutes. Then rise to the required temperature and hold the temperature for approx. 20 to 40 minutes.

<table>
<thead>
<tr>
<th>Heat soaking temperatures</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>– Conventional C&amp;B gold alloys</td>
<td>600 to 700 °C Legierungen</td>
</tr>
<tr>
<td>– Precious bonding alloys and white alloys</td>
<td>800 to 850 °C</td>
</tr>
<tr>
<td>– Non precious bonding alloys</td>
<td>850 to 900 °C</td>
</tr>
</tbody>
</table>

Note: The container of the uniVest Plus investment should be sealed and stored in a cool place. If the liquid becomes frozen it is irreversibly damaged. Do not shake before use. These instructions for use have been formulated after considerable testing in our laboratories. Alteration of the instructions for use may lead to changes in the results.
**Warning**

**Important**
These instructions supersede all previous editions.

**H373** May cause damage to lungs through prolonged or repeated exposure. Route of exposure: aspiration/inhalation.

**P260** Do not breathe dust.

**P284** Wear respiratory protection.

**P501** Dispose of contents/container to a recognised waste disposal centre.

**Product contains:** quartz and cristobalite.

For further information ask for the Health and Safety Datasheet from Cendres+Métaux SA.

**Storage:** uniVest Plus cannot be stored for an unlimited period, please refer to the back of the bag. As investment compounds are sensitive products, they must be protected against air, moisture and warmth in their original packaging. The ideal storage temperature is 18 °C.

Attention: store at room temperature!

**The special liquid** is sensitive to low temperatures such as when being transported during cold weather.

**Traceability, lot numbers:** When placing complaints, always quote the lot number (back of bag).

**Allergies:** Certain constituents of investment compounds may cause contact allergies on skin while using the investment. It is therefore advisable to wear gloves to protect the hands, and a face mask. Never mix investment compounds with different lot numbers.

**Liability**
The information provided herein represents state-of-the-art technology and assumes that the product has been checked carefully. We guarantee impeccable quality but are not liable for results due to further processing which is not usually within our control. The manufacturer assumes no responsibility whatsoever for damage due to non-adherence to these instructions, especially if the investment compound is used after the expiry date.

**Product range**

- Carton, 30 × 150 g bags
  - Cat. No. 0805 2160

- 1 × 1 litre uniVest Plus liquid
  - Cat. No. 0805 2161