

Phosphate-bonded investment compound containing graphite,
for use with precious and non-precious metal alloys

Indications

Cendres+Métaux-Ceramicor® is suitable for casting precious or non-precious metal ceramic or casting alloys.
Due to the high strength of this compound, moulds may be poured without using a metal casting cylinder.

Contraindications

Cendres+Métaux-Ceramicor® is not suited for the model casting technique.
Pd-based-alloys (Pd content > 50%).

Preparing the wax patterns

Once the sprues have been attached, apply wetting agent and allow it to evaporate or rinse off the residue with water (approx. 30°C).

Preparing the casting cylinder

Select the correct size of casting cylinder and line it with asbestos-free, refractory cylinder liner (Cendres+Métaux-Expandex). Fix the liner in place with wax, place it in water (for approx. 5 minutes) and shake it out well.

Size 1 and 3 cylinders: 1 layer Expandex

Size 6 cylinder: 2 layers Expandex

Mixing ratio

Size 3 casting cylinder: 1 x 160g bag

Mixing ratio – 25.5 ml liquid: 160 g powder

Recommended mixing liquid concentrations

These figures are to be considered guidelines only. The results may vary slightly due to the batch/lot, type of alloy and type of restoration being cast.

Mixing

Mix the liquid as required, pour it into a clean, dry mixing vessel and add the powder. Mix thoroughly by hand for approximately 20 seconds until the mixture is homogeneous. Then use an automatic mixer to mix it in vacuum for 60 seconds.

Please note:

Room and storage temperatures exceeding 22°C curtail the working time!

Avoid creating dust. Do not inhale dust (wear a face mask).

Pouring time

Approximately 4 minutes (depending on the proportions, room temperature and type of mixing unit). The consistency of the investment compound is thin enough to invest the patterns easily on a vibrator.

Setting time

Allow to set for 1 hour. **Large moulds, without metal cylinders, should be allowed to set for 2 hours.**

Type of alloy	Powder	Mixing liquid (expansion) (depends on friction required)	Distilled water	Total
Non-precious metal alloys	160 g	25.5 ml	–	25.5 ml
Ceramic alloys	160 g	12.75–21.5 ml	12.75–4.0 ml	25.5 ml
– Uniform thickness castings, e.g. copings	160 g	19.0 ml	6.5 ml	25.5 ml
– Castings varying in thickness, e.g. bridges	160 g	21.5 ml	4.0 ml	25.5 ml
Conventional casting alloys	160 g	12.75 ml	12.75 ml	25.5 ml

Please note: The higher the amount of concentrate in the liquid, the higher the expansion values.



Burnout/Preheating

Place the casting cylinder in a cold furnace. The maximum preheating temperature is **900°C**.

a) For wax patterns:

Heat rate < 8°C per minute

Hold at 250–300°C for 30–45 minutes (depending on the size/number of cylinders).

→ Place the opening of the casting cylinder downwards (enables the wax to run out)!

Raise the furnace to the end temperature at a rate of < 14°C per minute

→ Place the opening of the casting cylinder upwards (for degassing)!

Hold at end temperature for 30–50 minutes to heat the centre of the casting cylinder to the same temperature as the furnace.

b) Pattern resins and burnout plastic attachments:

Heat rate < 4°C per minute

Hold at 250–300°C for 30–60 minutes (depending on the size/number of casting cylinders).

→ Place the opening of the casting cylinder downwards (enables the wax/resin to run out/be eliminated)!

Raise the furnace to the end temperature at a rate of < 7°C per minute

→ Place the opening of the casting cylinder upwards (for degassing)!

Hold at end temperature for 30–50 minutes to heat the centre of the casting cylinder to the same temperature as the furnace.

Please note: Holding the temperature at 580°C for an additional 30–45 minutes increases the expansion and minimizes the risk of cracking.

Caution: If the preheating furnace is opened while the wax is burning out, the wax fumes may mix with the air and ignite.

Casting/Devesting

Cast the alloy as described in the manufacturer's instructions.

Once the casting cylinder has cooled to room temperature (ensures that the alloy attains its full mechanical properties), carefully remove the investment compound from the casting with plaster nippers. Then clean the casting by sandblasting it with aluminium oxide or glass beads. Precious alloys should be pickled to remove the oxide.

Please note: Do not inhale the dust (wear a face mask).

Moisten the working surface to clean it.

Physical properties (pure mixing liquid)

Total linear expansion: approximately 2.9%

Important

These instructions supersede all previous editions.

Warning: Cendres+Métaux-Ceramicor® contains quartz and cristobalite.

R 48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

S 22-36 Do not breathe dust. Wear suitable protective clothing.

Storage: Cendres+Métaux-Ceramicor® 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.

The **special liquid** is sensitive to low temperatures such as when being transported during cold weather. If flakes appear in the liquid, discontinue using it.

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 place set investment compound in a hot furnace.

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

1 Carton, 50 x 160g bags

1 x 160g bag

1 x 1 litre Ceramicor liquid

1 roll EXPANDEX

Order No. 083869

Order No. 083870

Order No. 083871

Order No. 083413