

Weighing



1

All components must be weighed:

- 1 part Acrystal Prima liquids
- 2,5 parts Acrystal Decor Carrara powders

1. first weigh the Acrystal Prima liquid in the mixing bucket.
2. (optional) add retarder.
3. (optional) add Acrystal pigments.
4. Basic Crystal powder must be weighed in a suitable separate container.



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Mixing



Acrystal mixing whisk

Use a high shear mixing blade at a mixing speed over 700 rpm in order to create a vortex and to break up small lumps.

1. blend the liquids (Acrystal Prima + retarder + pigments) for 15 to 30 seconds.
2. continuously mix liquid creating a vortex and slowly add the powder.
3. continue mixing until a lump free cream consistency is obtained.
4. if required incorporate thixotrope at the end.
5. leave for a few moments to clear any bubbles. Acrystal Decor Carrara batch mix is then ready for use.



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Use (Minimum temperature 12°C)

Pot life at room temperature of 17-20°C:

- 8 to 10 minutes without retarder
- up to 90 minutes with retarder



Gelcoat

1. apply a gel coat of 1 to 3 mm in the mould
2. prepare the Acrystal Prima for casting or lamination. (see « Acrystal Prima users guide »)
3. Let the gel coat dry until it becomes a satin-finish and does no longer stick on the finger and finish the casting or laminating according to the Acrystal Prima users guide.



Casting

Acrystal Decor Carrara can be directly casted. In this case extract air by usual techniques and cast into silicone rubber moulds.



Spraying

Acrystal Decor Carrara can be sprayed in a mould (gelcoat) or directly to foams such as polystyrene. It can be sprayed with any gun type.

Use :

- a nozzle of Ø 4 mm
- retarder to avoid that product sticks in the gun
- if necessary, add 1 to 5 % Acrystal Prima to get the mixing more fluid
- if necessary, add thixotrope to create a better adhesion to vertical parts of the mould.

Setting

- the mix will thicken and the exposed surface become matt.
- then the temperature will rise.
- once the item has returned to room temperature the process is finished.

Demoulding

- demoulding is possible after 20 minutes to 2 hours depending on the size and the shape of castings and laminatings.
- take off any excess material directly after demoulding.

Finishing

After demoulding, a resin skin covers the surface of the item. To remove this skin and bring the marble particles to the light there exist two possibilities:

- Directly after demoulding when the product is still soft.

Wash the surface with water. Wash more or less according to the requested appearance. For a smooth surface and a few sparkling particles wash less with a "normal" sponge. For a rougher surface with more sparkling particles wash more and/or use a brush.

The sparkling particles really appear only on the dry item.



- With a dry and hard product.

Sand by hand or by sander with an adapted sanding paper.



Curing

- leave the item to air dry in a suitable area - no heating is required to cure.
- 90 % of the hardness is achieved after 6 hours at 20°C.
- after 72 hours the item is completely cured.

Modelling

The Acrystal Decor Carrara can be used as a « modelling paste ». The interest is to have a material as easy to use as the clay, but that hardens at room temperature. No damage during the cooking.

Prepare the following liquid mixing:

- Acrystal Prima
- Thixo Acrystal Aqua 1,5%
- Retarder 0,5% (or more if necessary)

Then use this mixing in the following proportions by weight:

- 1 part of the liquid mixing above
- 6,5 parts of Acrystal Decor Carrara powders

Patina

L'Acrystal Finition can be used to give very realistic old stone or gres effects.

A few drops of pigment mixed with Acrystal Finition pure (for satin effects) or diluted 50% in water (for matte effects) can be used to create patinas.

Product too thick

L'Acrystal Decor Carrara might be too thick for some casts. In this case, it is possible to add a little water or Acrystal Prima resin in small dose: 1-2% maximum.

Pigments

Using acrylic resins, all kinds of pigments, liquid or powders can be added to Acrystal Prima. Simply make sure that:

- liquid pigments: first mix the pigments with the Acrystal Prima liquids, before incorporating the Acrystal Decor Carrara powders.
- powder pigments: first mix the pigments with the Acrystal Decor Carrara powders before adding them to the Acrystal Prima liquids.

Oven drying

Acrystal ideally dries in open air. To accelerate this process, you can place your Acrystal item in a drying oven, always under 40°C, to ensure slow drying and avoiding any humidity in the heart of the moulding.

Difficulty to bring the marble particles to the light

It is sometimes difficult to let the marble particles appear:

- too hard surface
- inaccessible part for sanding

The solution is to soften the surface with a little hydrochloric acid diluted 50%.

ATTENTION : Make sure not to let the acid too long in contact with the Acrystal Decor Carrara and rinse the object with water to prevent acid acts in the heart of the object.

Silicone mould

The ideal mould for Acrystal:

- it doesn't require any release agent
- it remains perfectly clean by demoulding
- as there is no solvent and low exotherm, its life time can be multiplied by 50 compared to polyester castings

Solid moulds

In case you use a solid mould :

- take off a maximum porosity on the surface in contact with Acrystal
- apply an adapted release agent like a professional release wax

Acrystal Prima has a low expansion when setting (<0,1%). In order to be able to take off the item after setting, it is imperative to have:

- either sufficient demoulding angles (> 2°)
- or demountable parts or parts you can open

Usual degassing

For Acrystal Decor Carrara you don't need any particular degassing material:

- at the end of mixing let the product rest a few seconds before using it. To take off bubbles faster you may tap the mixing bucket.

- in case of casting, put by brush some Acrystal on the mould sides before casting the item. This prevents from getting bubbles on the surface.



- cast Acrystal in your mould in a thin trickle to prevent air bubbles forming during the filling.

Shelf life of the product

Acrystal Decor Carrara has a shelf life of one year. Always firmly close or seal buckets and cans to extend life. With age, setting time gets longer but this will not affect the quality of the final product.

Rotomoulding

Acrystal Decor Carrara is perfectly adapted to rotomoulding in a closed mould. If necessary, add some thixotrope to the mix.

Lumps

Getting lumps at the end of mixing is due to a low mixing speed.