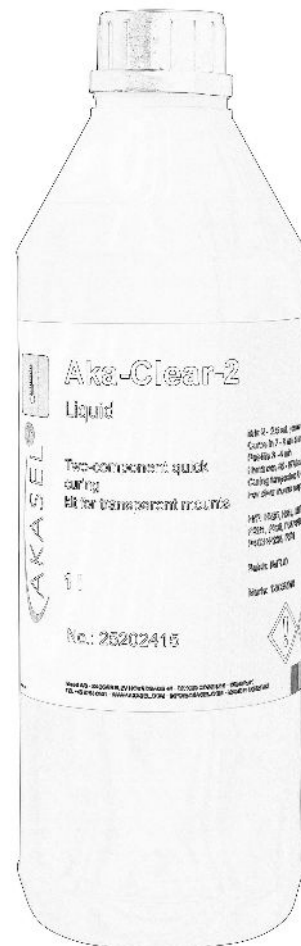
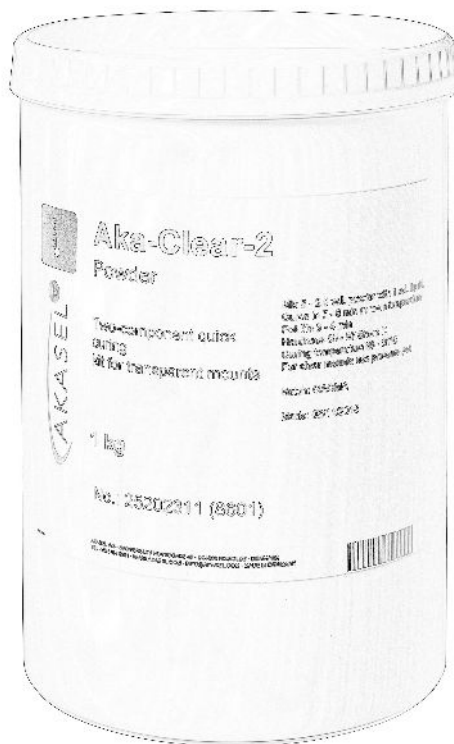


Akasel User Guide

Aka-Clear-2



Introduction

Aka-Clear-2 is an acrylic mounting system consisting of an acrylic powder and an acrylic liquid. After mixing the 2 components the mixture cures in about 8 to 10 minutes at room temperature.

Safety Precautions

For detailed information please read the SDS of Aka-Clear-2 Liquid and Powder here:

<https://www.akasel.com/sds-pds/>

- Avoid contact with powder, liquid and mixed acrylic. Wear protective gloves and protective clothing whenever you handle acrylic resins. If you do get powder, liquid or mixed acrylic on your skin, remove it as soon as possible. Always wash thoroughly with soap and lukewarm water after using acrylic.
- Protect your eyes from contact with powder, liquid and mixed acrylic by wearing appropriate eye protection.
- Avoid breathing concentrated vapours.
- Avoid ingesting acrylic. Wash thoroughly after handling acrylic, especially before eating or smoking.
- Use a fume hood for mixing, mounting and curing of acrylic resins.

Mixing Ratio

The mixing ratio for acrylic resins is not crucial, therefore they can be measured by volume.

The mixing ratio is 2-2.5 vol. of powder to 1 vol. of liquid.

For samples with small cavities e.g. PCB, a little extra liquid can be added to get a thinner mixture that can fill even small holes and cavities.

To fill very small holes and cavities, the sample can be dipped into Aka-Clear-2 liquid just before embedding. The liquid will cure from the catalytic process when the entire mount is cured.

How Much Should I Mix?

Mix a maximum of 100 ml of powder and 50 ml of liquid. The pot-life is quite short, therefore the amount should not be too large, otherwise the viscosity of the mixture will increase and it will no longer be possible to pour the mixture into the mounting cup.

Mixing

Measure first the powder then the liquid into a mixing cup.

Mix slowly (in order not to introduce air bubbles) but thoroughly until the mixture is uniform.

Pouring

Pour the mixture slowly into the mounting cup, without trapping air around the sample. You can use the mixing stick to direct the mixture over the sample.

Pot-life

The pot-life of the mixture is about 1-2 minutes. Therefore only limited amounts should be mixed.

Covering the Samples

Covering the mounting cup with a piece of paper/plastic or a mixing cup will prevent the attraction of moisture and thus stop the top of the mount from becoming sticky.

Curing Schedule

Aka-Clear-2 cures at room temperature, thus no oven or other means of heating is necessary. Curing time is about 8 minutes.

Extracting

Aka-Clear-2 has a certain, limited shrinkage, therefore the mounts can be extracted quite easily. Remove the bottom part of the mounting cup, then apply pressure to the side of the mounting cup to loosen the mount.

Then press the mount out through the top opening as the mounting cups are slightly conical.

Additional Information

To see the entire process in detail you can watch our video The correct use of Acrylic Cold Mounting Resins on YouTube:

<https://youtu.be/m5TbAZetaFw> or:



Lifetime

When stored correctly, at about 22°C in a dark place, the lifetime of both powder and liquid is at least 2 years from the production date.

After opening, the lifetime is 1 year when the lid is tightened securely immediately after each use and the container is stored at about 22°C in a dark place.