

# S.A.M. GreenCast Epoxy Resin

#### Description

This epoxy is produced with a high content of carbon of vegetable origin. (37%)

GreenCast Epoxy is an epoxy created with the latest innovations in biobased chemistry. Among other things, the brightness and performance have improved.

This widely applicable epoxy casting resin has excellent properties. Suitable for casting objects, jewelery, prototypes, river tables, etc ...

#### **Specifications**

| Mixing ratio in weight      | [A:B]                | 100:42        |
|-----------------------------|----------------------|---------------|
| Mixing ratio in volume      | [A:B]                | 100:50        |
| Pot life 100 gram at 20°C   | [hour]               | 12*           |
| Pot life 100 gram at 30°C   | [hour]               | 6*            |
| Gel time, 6 mm. at 20°C     | [hour]               | 26*           |
| Gel time, 6 mm. at 30°C     | [hour]               | 23*           |
| De-mold time, 6 mm. at 20°C | [hour]               | 60            |
| De-mold time, 6 mm. at 30°C | [hour]               | 48            |
| Fully cured after           | [days]               | 3             |
| Viscosity at 20°C           | [mpa.s]              | 360           |
| Color                       |                      | Crystal clear |
| Hardness                    | [Shore D]            | 70            |
| Density                     | [g/cm <sup>3</sup> ] | 1,1307        |
| Minimim thickness           | [cm]                 | 0.5           |
| Maximum thickness           | [cm]                 | 10            |
| Temperature resistant up to | [°C]                 | 61            |

- \* With a larger quantity, the processing time and curing time will be shorter!
- \*\* We do not recommend processing a large quantity in one go if you have little experience. If you do want to do this, work at 18°C with a mixing bucket with a large bottom / diameter and take into account a much shorter processing time!

#### **Processing**

Make sure that the surface is tight and not porous. This can cause air bubbles in the epoxy. Use a thin layer of epoxy or primer for this.

Always use safety gloves and goggles when handling this material. Process the resin at room temperature (18-25°C) and at a humidity lower than 70%. In order not to get any deformation in the surface, the temperature must remain constant during the entire curing process. Also avoid direct sunlight through a window and prevent drafts.

Add the A and B component in the correct ratio (A:B = 100:42 by weight) and mix well. Allow enough time for mixing (2-3 minutes) and make sure that the corners and bottom of the mixing bowl are included. Optionally, you can pour the whole thing into a second bowl and mix it again. Now add any color effects and stir again. Let air bubbles escape for a minute. If necessary, help by vibrating / rattling the tray. Make sure that the product does not get too hot.

#### **Characteristics**

- 37% organic origin
- Very clear
- According to the latest innovations
- For objects, jewelry, river tables and more
- Mixing ratio by weight:
  A: B = 100: 42
- Mixing ratio in volume:
  A: B = 100: 50





The Epoxy resin is now ready for use. Pour the mixture into your mold or prepared model in a thin stream.

Note, if you are making larger quantities, use a mixing bowl with a large base. Avoid a thick layer in the mixing bowl because it heats up very quickly!

The best way to remove air bubbles is with Epoxy Air Extractor or by means of a flame. Do not use flames if you have diluted the epoxy with alcohol or other flammable products.

## If you are going to apply the resin in several layers (multi-layered work):

Wet on wet:

When pouring a second layer of a liquid into a first layer of epoxy liquid, you have to make sure that the exothermic reaction has completely worn off. An exothermic reaction is a reaction that releases energy. In this case, heat.

If you want to be sure of this, you wait until the second layer is no longer sticky, but you still see a fingerprint in the epoxy.

Wet on dry:

It is necessary to sand the previous layer and make it dust-free.

Storage

Product stored in tightly closed packaging between 15 and 25°C has a shelf life of at least 2 years.

### **Safety**

Contact with the skin must be avoided. Causes skin irritation. May cause an allergic skin reaction. Wear protective gloves when handling this product. Always work in a well-ventilated area. Toxic to aquatic life with long lasting effects.

Skin Contact: Remove all contaminated clothing and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water.

Eye contact: Flush the eye with running water for 15 minutes. Consult a doctor.

Ingestion: rinse mouth with water. Consult a doctor.

Inhalation: Remove casualty from exposure, ensuring personal safety. Consult a doctor.

For further information, see the safety data sheet.

