

## What is Crystallization:

A phase change from liquid resin to its solid format tends to growth a seed crystals within epoxy resin polymer matrix. This phenomenon is called epoxy crystallization and which is very common. Crystallization shows up as cloudiness, free floating crystals, crystal masses, or as a completely solidified mass. It is the same process that causes honey to crystallize at home.

**The Cause:** There are several factors that contributes towards crystallization such as temperature cycles, extreme cold, contamination of container etc., however, crystallization of epoxy resins is completely reversible and does not effect the properties of epoxy resin.

## Solutions:

Crystallization in base epoxy resins and two component epoxy formulations is a major inconvenience but not an insurmountable problem. Heating these materials is an ideal solution. If you will find crystal growth in the resin container (part A), please follow the steps listed below...

**Step 1:** Heat the part A gently at about 50-60 °C (120-140 °F) for 45-60 minutes.

**Step 2:** Stir thoroughly this warm component, reincorporating all settled material and Crystals from the container sides and assure all crystals have been melted and the heat is being evenly distributed. Note: If crystals reappear, merely apply heat and remelt.

**Step 3:** Once all crystals are melted, cool down part A at room temperature before use. Part A is now ready to mix with part B.

**Step 4:** Make sure lids (closure), spigots, spouts, bottle neck (thread and lips) etc. are completed clean using IPA before close the container.

**Step 5:** If resin (part A) and hardener (part B) are left over, store them between 16 and 27 °C [ 60 and 80 ° F] in dry area away from sunlight. Prolonged storage or storage at or near freezing temperatures will again cause crystallization.

## Very important:

Single component (one part) epoxies must not be heated! If you suspect crystallization, please contact MG Chemicals for instructions.