



## Fusing Glass in a Microwave Kiln

Fuse glass right in your microwave oven! <u>FuseworksTM Microwave Kiln</u> lets you create amazing fused glass pieces for use in jewelry, mixed media projects and more – in your microwave!

## Joe Rotella

Materials	Tools
Kiln paper	Fuseworks™ Microwave Kiln
90 COE Fusing Glass	Glass cutter
Dichroic glass bits & pieces	Hot mitts
	Microwave (800-1200 Watts)

## **Important Safety Warnings**

- Read and follow all manufacturer instructions (microwave and kiln) before proceeding. This is not intended to be a complete list or replace their instructions.
- A microwave kiln is not a toy. Children under the age of 16 should not use this kiln without strict adult supervision.
- Follow ALL microwave manufacturers safety instructions.
- Microwave needs to be free of food and other debris before using it with the microwave kiln.
- Clean the microwave after each use following the manufacturers instructions
- The interior of the <u>Fuseworks™ Microwave Kiln</u> and its contents can reach temperatures of 1400°F 1600°F which is extremely hot. Temperatures this high can cause serious bodily harm and property damage if not handled properly. Keep kiln away from children and pets while fusing and cooling.
- Prolonged heating of <u>Fuseworks™ Microwave Kiln</u> can cause damage to the interior of the kiln and microwave. Do not exceed 6 minutes of continuous fusing/heating time.
- A minimum 3" clearance must be maintained between the ceiling of the microwave and the top of the kiln.
- · If you do not have a turntable, it is recommended that a ceramic fiber blanket be used under the kiln.
- Remove <u>Fuseworks™ Microwave Kiln</u> immediately from the microwave oven when heating is complete.
- Always use heat resistant gloves/mitts when handling the hot kiln. Using two hands, hold the base and the top together while removing kiln from the microwave oven.
- Place hot kiln on a heat resistant and non-combustible surface such as fiber board, ceramic tile or a trivet during the
  cooling stage. Any other surface could result in melting or burning of the surface material or a fire. Keep your area
  clear from any clutter. Do not place kiln to cool under a kitchen cabinet. KEEP OUT OF REACH OF CHILDREN AND
  PETS.
- When removing the lid from the base, place the lid upside down on a heat resistant surface.
- Only use the base provided with microwave kiln. Do NOT use kiln wash on the base of the <u>Fuseworks™ Microwave</u> <u>Kiln</u> Use kiln paper only.
- Do not use the kiln to fire anything other than glass, i.e. metals or combustibles of any kind.
- Use at your own risk and follow all recommendations and common sense safety precautions.

## **Project Steps**

These are intended as a guide only. Follow the instructions that come with your <u>Fuseworks™ Microwave Kiln</u>.

- 1. If you're using the <u>Fuseworks™ Microwave Kiln</u> for the first time, be sure to pre-fire it following the manufacturer's instructions.
- 2. Cut a square of kiln paper to fit the base of <u>Fuseworks™ Microwave Kiln</u> iln. Place paper on the kiln base. Kiln paper is only good for one firing.
- 3. Layer cut glass on top of kiln paper. Leave at least a 5/8" border around the glass and the edge of the kiln paper. Do not allow the glass to touch the sides of the kiln wall or the base of the kiln. Glass allowed to touch the kiln base or walls will stick and can cause irreparable damage to the kiln during the fusing process.
- 4. Carefully place kiln base with glass in the center of microwave oven. Place lid on top of the base. WARNING: Never leave microwave or kiln unattended during the firing process.
- 5. Set temperature for the microwave on high. Choose times for firing following guidelines included in the instructions provided with the Fuseworks™ Microwave Kiln.
- 6. When microwave time has expired, use heat resistant gloves or mitts to carefully open the lid. If your piece is not fused to your liking, return kiln lid and microwave at 30 second intervals until piece is fused. Do not leave the lid off the kiln for extended periods of time during this stage. Never touch the glass. Do not heat for more than 6 minutes. HOT glass looks like COLD glass, BE CAREFUL!
- 7. A good fuse indicator is to watch for a red glow to appear in the hole at the top of the kiln. When it changes to a yellow/orange, this will indicate the glass has entered a full fuse stage. At this stage glass corners will become rounded. When you see more of a yellow glow, the piece should be fully fused.
- 8. When desired results have been achieved, using heat resistant gloves, remove the whole kiln from the microwave oven. Set on a heat resistant pad. The area around the <u>Fuseworks™ Microwave Kiln</u> should be free of clutter and in a safe location. Do NOT allow to cool under an overhead cabinet. Never block the opening at the top of the <u>Fuseworks™ Microwave Kiln</u>.
- 9. Do not remove lid at this time. Removing lid will cause thermal shock, resulting in breakage.
- 10. Allow your fused piece to anneal for a minimum of 30 minutes without removing kiln lid; time could be longer depending on the thickness of the project. You will be tempted to open the lid and look at your piece but do not, as this can be dangerous and will result in cracked projects.
- 11. Do not reuse the kiln until it has completely cooled for at least 30 minutes. Continuous use without cooling can cause damage to the kiln.
- 12. Your fused project must cool completely before removing from the kiln. This can take up to 40-50 minutes. Once cooled, you can remove the fiber paper from the back of the fused project by rubbing the surface with a wet paper towel or cleaning the project under warm water.

