

# Soldering FAQ

by

FusionBeads.com

**Q: What is the solder in the soldering kit made of?**

**A:** The solder is lead-free and made of tin, copper and silver. It is a solid-wire solder that contains no flux in the core. It is not silver-bearing.

**Q: What type of surfaces should I work on while I'm soldering?**

**A:** Place the Heat Resistant Solder Mat on a work surface. Although it is heat-resistant, the mat will still get hot and can heat the surface beneath it. Add an extra layer (such as a stainless steel sheet or tile) under the mat if you are working on a surface that you want to protect. If you do not have a Heat Resistant Solder Mat, you can use a ceramic tile.

**Q: Can I use a photograph in a soldering project?**

**A:** If you want to use a photo image, we suggest using a photocopy. The top layer of photo paper or any glossy paper will melt when heated, pull away from the photo and stick to the glass, distorting the image.

**Q: Can I put several layers of paper between the two pieces of glass?**

**A:** Yes, you can layer paper, stickers, stamps or other elements to create dimension. You'll have the best results if you distribute the elements evenly so that the two pieces of glass remain parallel and do not "rock."

**Q: Can I use more than two pieces of glass in my soldering project?**

**A:** Yes, you can use additional glass pieces to achieve a layered effect. You may need to go back over the copper tape with another piece of tape to make it wide enough to fit around the glass.

**Q: Can I put flat back crystals on the image under the glass?**

**A:** Yes, you can use crystals as long as you distribute them evenly to prevent the glass from "rocking." For example, if you put a crystal in one corner, place another crystal in the opposite corner.

**Q: Can I use sterling silver jump rings with my soldered piece?**

**A:** We do not recommend using sterling silver. The heat from the soldering iron can cause the surface of the silver to turn black (called fire scale). This black coating must be removed by using an acid solution known as pickle – it cannot be polished.

**Q: Can I use the soldering iron to solder sterling silver or fine silver?**

**A:** No, the soldering iron in the kit is intended only for use in making soldered pendants, as shown in our Basic Soldering Beading Technique, and related applications (such as stained glass).

**Q: What kinds of metal does the soldering kit work with?**

**A:** We recommend using the base metal jump rings that come with the kit and base metal components.

**Q: My copper tape is crooked – can I fix it?**

**A:** You can always peel off the tape and apply a new piece.

**Q: The wavy tape has waves only on one side. How can I put a wave design on both sides of my piece?**

**A:** After you have applied the wavy copper tape, go back over the tape (as you would when adding tape to layered glass pieces) with another piece of wavy tape – this time with the wave on the opposite side of the piece.

**Q: I applied flux to my whole piece before soldering, and now the edges of the tape have turned green. Why?**

**A:** The flux has dried on the copper foil, causing oxidation. Use a damp cloth to wipe off the dry flux and oxidation. To avoid oxidation, apply flux on one side at a time as you are working.

**Q: Do I have to worry about the solder sticking to the glass?**

**A:** No, the solder will bond to the copper foil tape only (after flux is applied) and will not stick to glass.

**Q: Can I make a soldered piece without using the copper tape?**

**A:** No, solder will not adhere to glass – only to the copper foil tape treated with flux.

**Q: Blobs of solder are on my work surface and sponge. What can I do with them?**

**A:** You can still use the solder. Instead of adding fresh solder to the soldering iron, use the hot iron to pick up a blob. Apply the solder to your piece as usual.

**Q: Why won't the solder stick to the copper foil tape?**

**A:** You did not use sufficient flux. Flux acts as a bonding agent between the solder and the tape – without it, the solder will not stick. Since flux will evaporate over time, you may have to reapply more flux even if you have already applied it.

**Q: Why is my solder uneven?**

**A:** Make sure your piece is seated flat on the table. If your piece is at an angle, gravity will pull the solder downward. Remember to apply flux each time before you add solder, which will help the solder flow more smoothly.

**Q: Why do black spots appear in the solder after I've heated it?**

**A:** Spots are generally caused by dirt or other particulate matter getting caught in the solder. Most of the spots will come off when you wash or buff your piece when it's finished.

**Q: Why does my glass keep breaking?**

**A:** You may be overheating the glass, or the glass has been clamped directly. Avoid touching the glass as you apply the solder; instead, place the clamp on the copper or solder.

**Q: Why won't my solder form the domed shape that I see in samples?**

**A:** You are not using enough solder. Don't be afraid to use too much – you can always remove excess solder with the soldering iron.

**Q: Why are the soldered edges of my piece lifting away from the glass?**

**A:** You may not have pressed the copper foil tape down sufficiently, or you may have applied too much flux, causing the tape to come up from the glass.

**Q: If my piece is too hot to touch, can I use my jewelry pliers to move it?**

**A:** We don't recommend it. Heating the metal tips of pliers will cause the metal to anneal, making your pliers too soft for jewelry work. Designate a different pair as "hot pliers" and use them for this purpose.

**Q: I've attached a jump ring in the wrong place. What can I do?**

**A:** Reheat the solder holding the jump ring in place, and move the jump ring carefully. Be sure to hold the jump ring steady with a pair of hot pliers or hemostat clamps while you are heating the solder.

**Q: My soldered piece is finished, but I'm not happy with the result. Can I take it apart and start over?**

**A:** Definitely. The solder can be melted off the copper tape easily with the soldering iron. Let the solder drip off onto your mat or tile, and reuse it for the next piece.

**Q: What is the best way to store my soldering iron after use?**

**A:** When you are finished using the soldering iron, unplug it, and let it cool slightly. Melt a small amount of solder onto the tip. Let the iron cool completely in its stand.

**Q: How many charms can I make with my new soldering kit?**

**A:** If you use 1"x3/4" glass, you can make approximately 35 charms. Numbers will vary depending on exactly how much solder you use and the thickness of your glass.