

How To Make Shrink Plastic

Introduction: The Magic of Shrink Plastic

If you have ever watched a piece of plastic shrink and harden in the oven, transforming from a flimsy sheet into a thick, durable charm, you already know the magic of shrink plastic. This simple yet captivating craft has been a favorite among artists, hobbyists, and DIY enthusiasts for decades. The process is straightforward: you draw or stamp on a special type of plastic, cut out your shapes, and bake them until they shrink to roughly one-third of their original size. The result is a sturdy, glossy keepsake that can be used for jewelry, keychains, ornaments, magnets, and so much more.

But what if you want to take it a step further? Learning **how to make shrink plastic** from scratch, rather than buying pre-made sheets, opens up a world of possibilities. You can customize the thickness, transparency, and even the texture of the plastic. You can recycle certain types of plastic containers and turn them into craft supplies. Making your own shrink plastic is not only cost-effective but also environmentally friendly. In this comprehensive guide, we will walk you through everything you need to know about **how to make shrink plastic** at home, including the materials required, the step-by-step process, expert tips, and creative project ideas. By the end, you will have the confidence to produce your own shrink plastic sheets and craft unique pieces that are entirely your own.

What Exactly Is Shrink Plastic?

Before we dive into the making process, it is helpful to understand what shrink plastic actually is. Commercially available shrink plastic, often sold under brand names like Shrinky Dinks, is made from polystyrene sheets. Polystyrene is a type of plastic that, when heated, contracts and becomes thicker and harder. The plastic is typically rough on one side, which allows colored pencils, markers, and other drawing materials to adhere properly. When the plastic is exposed to heat, the polymer chains in the polystyrene relax and tighten, causing the sheet to shrink evenly while becoming approximately nine times thicker than its original form.

The key to making your own shrink plastic lies in finding the right type of polystyrene. Not all plastics behave the same way when heated, so you need to be selective. The most common source for homemade shrink plastic is **#6 polystyrene** containers, which are often used for food packaging like takeout containers, salad boxes, and certain types of cups. These containers are marked with a recycling code 6 inside a triangle. Before we begin, it is essential to emphasize that you should only use plastics that are clearly marked with the #6 recycling symbol. Other plastics may release toxic fumes or melt unevenly when heated, creating a mess or even a fire hazard.

Materials and Tools You Will Need

To successfully make your own shrink plastic, gather the following materials and tools. Most of these items can be found around your home or at a local craft store.

Essential Materials

- **#6 Polystyrene Plastic:** Look for clean, clear, or white containers with the #6 recycling symbol. Takeout containers, deli lids, and clear bakery boxes are excellent options.
- **Sandpaper:** Fine-grit sandpaper (200 to 400 grit) is used to create a rough surface on the plastic so that your markers, colored pencils, or stamps adhere properly.
- **Drawing and Coloring Tools:** Permanent markers, acrylic paint pens, colored pencils, or rubber stamps with permanent ink. Avoid water-based markers as they will smear.
- **Scissors or a Craft Knife:** Sharp scissors work well for simple shapes, while a craft knife and cutting mat are better for intricate designs.
- **Hole Punch:** A standard office hole punch or a craft punch is useful if you plan to make keychains or ornaments.
- **Baking Sheet and Parchment Paper:** You will need a flat baking sheet lined with parchment paper or a silicone baking mat to prevent the plastic from sticking.
- **Oven or Toaster Oven:** A conventional oven or toaster oven with accurate temperature control is necessary for the shrinking process.

Optional but Helpful Tools

- **Ruler and Pencil:** For measuring and marking straight lines before cutting.
- **Tweezers or a Toothpick:** These are useful for lifting hot plastic out of the oven or for flattening curling pieces during baking.
- **Heat Gun:** If you prefer not to use an oven, a heat gun can be used to shrink small pieces individually. This method requires more control and patience.
- **Cookie Cutters:** You can trace around cookie cutters to create consistent shapes.

Step-by-Step Guide: How to Make Shrink Plastic at Home

Now that you have your materials ready, let us go through the entire process of making and using your own shrink plastic. Follow these steps carefully for the best results.

Step 1: Clean and Prepare the Plastic Container

Thoroughly wash your #6 plastic container with warm soapy water to remove any food residue, grease, or labels. Dry it completely with a lint-free cloth or paper towel. Any leftover residue can cause discoloration or bubbling when the plastic is heated. Once the container is dry, cut away the curved or angled parts so that you are left with flat sheets. The flatter the plastic, the more evenly it will shrink. Some containers have raised edges that can be trimmed off with scissors.

Step 2: Sand the Surface

The smooth side of the plastic will not hold color well. Using fine-grit sandpaper (200 to 400 grit), lightly sand one side of the plastic sheet in a circular motion. You are not trying to sand it down completely, just enough to create a frosted, matte surface. This roughened surface provides grip for your markers, pencils, or stamps. If you want a glossy finish on your final piece, you can leave one side unsanded, but for the best artwork adhesion, sand the side you intend to draw on.

Step 3: Draw or Stamp Your Design

Place your sanded plastic sheet on a flat surface. Use permanent markers, acrylic paint pens, or colored pencils to create your design. If you are using rubber stamps, apply permanent ink to the stamp and press firmly onto the sanded surface. Keep in mind that the plastic will shrink to about one-third of its original size, so any details will also shrink. Fine lines and small text may become difficult to read after shrinking, so draw slightly larger than your desired final size. Also, remember that if you are creating text, it will shrink down proportionally, so write clearly and boldly.

Pro Tip: Test your colors on a small piece first. Some markers may change shade slightly during baking, so it is wise to experiment before committing to a large design.

Step 4: Cut Out Your Shapes

Using sharp scissors or a craft knife, carefully cut around your design. Leave a small margin around the edges if you want a border, or cut exactly along the outline for a clean shape. For intricate designs with sharp corners or tiny details, a craft knife on a cutting mat gives you more precision. If you plan to hang your creation, use a hole punch now, before baking. Punch a hole at least 1 cm away from the edge, as the hole will shrink along with the plastic. A standard hole punch works well, but you can also use a small drill bit or a sharp knitting needle to create a hole.

Step 5: Preheat the Oven

Preheat your conventional oven or toaster oven to 160°C to 180°C (325°F to 350°F). Every oven behaves slightly differently, so it is wise to check your plastic manufacturer's instructions if you are using commercial sheets. For homemade plastic from #6 containers, 175°C (350°F) is a reliable starting point. Place a baking sheet lined with parchment paper or a silicone mat on the center rack of the oven. The parchment paper prevents the plastic from sticking and makes cleanup easy.

Step 6: Bake the Plastic

Place your cut-out shapes onto the prepared baking sheet, leaving some space between each piece. They can be placed close together, but they should not overlap. Place the baking sheet in the preheated oven and close the door immediately. Watch the plastic through the oven window. Within a minute or two, you will see the pieces begin to curl, twist, and move. This is completely normal. Do not open the oven door during this phase, as the rush of cool air can cause uneven shrinking. After another minute, the pieces will flatten out again and lie flat. The entire shrinking process usually takes 2 to 4 minutes, depending on the thickness of the plastic and the oven temperature.

Important: If a piece does not lie completely flat after it has shrunk, you can gently press it flat with a spatula or a flat heat-resistant object immediately after removing it from the oven. Be quick and careful, as the plastic will harden within seconds.

Step 7: Remove and Cool

Once the plastic pieces have stopped moving and are flat and smooth, remove the baking sheet from the oven using oven mitts. Let the plastic cool on the baking sheet for about 10 to 15 seconds, then gently transfer the pieces to a flat surface such as a countertop or a cooling rack. They will harden quickly as they cool. Do not touch them with bare hands until they are completely cool to the touch, as they may still be soft and can deform. Allow them to cool completely for at least 2 to 3 minutes before handling.

Step 8: Finishing Touches

After cooling, your shrink plastic creations are ready to use. If you want to add extra shine, you can apply a thin layer of clear epoxy resin or a glossy sealant spray. This is optional but can enhance the colors and give a professional, glass-like finish. You can also sand the edges lightly if they feel sharp. Attach jump rings, keychain rings, or cord through the hole you punched earlier, and your homemade shrink plastic item is complete.

Tips for Success with Homemade Shrink Plastic

Making your own shrink plastic is simple, but a few tips can help you achieve consistently excellent results.

- **Test Your Plastic.** Before investing time in a detailed design, cut a small test piece from your #6 container and bake it. This will confirm that the plastic shrinks evenly, does not produce smoke, and gives the desired thickness and clarity.
- **Work in a Well-Ventilated Area.** While #6 polystyrene is generally safe to bake, it is always a good idea to open a window or use a ventilation fan, especially if you are working with larger quantities. If you notice any strong chemical smells, turn off the oven and check your plastic source.
- **Colour Selection Matters.** Some colors, like dark blue or black, can appear different after shrinking because the plastic becomes more opaque. Test your colors to see how they change. Pastels and bright colors tend to remain true.
- **Account for Shrinkage.** Remember that the plastic shrinks to about one-third of its original size, but it also becomes about nine times thicker. If you need a specific final size, multiply your desired size by three to determine the size of your starting shape.
- **Keep Designs Simple at First.** If you are new to making shrink plastic, start with simple shapes like circles, hearts, or squares. As you gain confidence, you can attempt more complex patterns and layered designs.

Creative Project Ideas for Your Homemade Shrink Plastic

Once you have mastered **how to make shrink plastic**, the creative possibilities are endless. Here are some inspiring ideas to get you started.

Jewelry and Accessories

Make your own earrings, pendants, bracelets, and rings. Because the plastic becomes thick and sturdy after shrinking, it holds up well as wearable art. You can create matching sets