

INSTRUCTION MANUAL

CHOCOLATE FACTORY, BLACK ROCK, RHINESTONE, BLIZZARD AND IVORY.



In this document you will find all necessary information for working with Chocolate Factory, Black Rock, Ivory, Blizzard and Rhinestone as well as bespoke materials made of polycarbonate or polystyrene. If you have any questions, remarks, changes, imperfections or suggestions please send an email to info@plasticiet.com so that we can improve the Instruction Manual. Plasticiet is not responsible for any incidents occurring when handling our materials.

TABLE OF CONTENTS

CUTTING AND MILLING

GLUING

- End gluing
- Mitre gluing
- Laminating
- Substrate gluing

HEAT BENDING

SANDING AND POLISHING

- Sanding
- Polishing

MAINTENANCE

- General info
- Daily use
- Cleaning
- Care and repair
- End of life



INSTRUCTION MANUAL

CUTTING AND MILLING



Safety precaution: Please wear eye protection, plastic shavings may be hot or sharp.

All of our material has some oversize of roughly 4cm. To make sure the material is square, start by cutting two sides as reference points.

When cutting or milling we cannot press it enough that you use sharp tools, low rotary speeds and a fast movement speed. These materials are prone to friction which might cause the material to melt if not handled properly. Grease can be applied to make your machinery run smoother.

A wood blade, aluminium blade and plastic blade all work well on these materials as well as mill bits for wood, aluminium and plastic.

If you cannot adjust the rotary speed of your tools or if you don't have access to sharp tools we advise you to cut the material twice to get the cleanest result.

Measure carefully and make your setup ready properly before sawing the material. Cut it in a quick, fluent and controlled motion.

When milling, it is advisory to not go all the way through the material in one go but to mill it in steps. It is important to fix the material to your working table with clamps, screws or any other method you are comfortable with. You don't want the material to move during milling as a mill bit getting caught in your project may be disastrous for the result. Prepare your milling setup properly, measure carefully and mill in a quick, fluent and controlled motion.

All of the above is also applicable when performing mitre cuts.

INSTRUCTION MANUAL

GLUING



Safety precaution: Please wear gloves, eye protection and a respirator or work in a ventilated room as the solvent glue may be irritating to your skin, eyes and lungs.

Add your cyanoacrylate glue and activator to your order via email.

All surfaces to be glued should be free of grease, particles and dust. We advise to use paper or waxed paper to put underneath your project, to refrain it from sticking to your work table. The to be glued surfaces should be roughened up prior to gluing.

End gluing

Make sure the two surfaces facing one another are dead straight and your worktop is flat. The finished sides should be facing downwards, so any height difference is compensated. Remove any dust or particles underneath your project. Make sure you have some weights and/or clamps ready to put onto the surface so that it will stay in place.

Apply the cyanoacrylate to both surfaces, press one side firmly to the other and apply weights and/or clamps. Optionally apply some activator on top of the seam. The material should dry at least one full day before acquiring its full bonding strength.

Mitre gluing

Make sure the two surfaces facing one another are dead straight and your worktop is flat. Make sure you have some clamps ready or a jig prepared.

Connect the pieces together using strong tape where the mitre joint will be. Remove dust prior to taping to improve its adhesion and make sure the tape is properly sticking to the material. Check if the joint is properly connecting prior to gluing.

Apply the cyanoacrylate to one surface, fold your joint together and assemble it with your clamps or jig. Optionally apply some activator in the inside of the joint. The material should dry at least one full day before acquiring its full bonding strength.

Laminating

Roughen up the to be glued surfaces. When laminating it is of utmost importance to clean your material to remove any dust or grease. You will also require a press, many clamps or a roller to which you can apply weight.

Apply the cyanoacrylate to both surfaces and connect the surfaces to each other. Apply pressure with a press, many clamps or a roller. If you are going to laminate multiple layers then either wait 4 hours or laminate all your surfaces and clamp when finished. The material should dry at least one full day before acquiring its full bonding strength.

Substrate gluing

There are two ways to glue Plasticiet to a substrate. When working on a large surface, it's best to use a flexible mounting sealant to avoid any warping or damage caused by differential thermal expansion. Small surfaces can be glued with cyanoacrylate. It's also possible to screw the material from the backside. When doing so make sure to pre-drill Plasticiet in a smaller diameter than the screw, and to pre-drill the substrate in a larger diameter to avoid thermal expansion problems.

INSTRUCTION MANUAL

HEAT BENDING



Safety precaution: Please wear heat resistant gloves to refrain from burning yourself and preferably a respirator or work in a ventilated room to protect your lungs.

You can use an oven or infrared panel heat up your material. Prepare your work by cutting it in oversize, the edges of your material might curl up slightly, so these should ideally be removed after bending but can also be sanded flat. When using a bending mould, it is best to pre-heat that as well. The smallest advised bending radius is 5cm.

An oven should not be heated to more than 120`C or 248`F. Heat up your part until it collapses under its own weight, at that point it is ready to bend. Bend it into the preferred curve and secure it with straps, tape, clamps or any solution you work with comfortably. When it is cooled down, the material bends back minimally but take into account that it might bend back slightly.

INSTRUCTION MANUAL

SANDING AND POLISHING



Safety precaution: Use a vacuum cleaner or wear a respirator as breathing dust is harmful to your lungs.

All of our materials are finished standardly to 240grid. Sanding can best be done by someone with experience.

Sanding

Preferably with a random orbital sander, slowly and evenly move over the surface of your material, covering the entire surface. Always keep your sanding machine in motion, as holding it in the same position might cause the material to melt due to the friction caused.

At Plasticiet we move our sanding machines roughly at 10cm per second. Start at one corner and zig zag your way to the other side of the sheet, covering the whole area. Do this until you can move on to the next grid or you are satisfied with your result.

Finishing

Applying Valma Plastishine to your sanded surface will bring the colours to life! Use a cotton rag to apply Plastishine and rub it out after waiting a few minutes.

Instead of applying Plastishine, the surface can also be coated with a (UV repellent) varnish. To get the desired effect, make sure your surface is grease and dust free. Apply a first coating of transparent varnish, and lightly sand it when it's dry. Then apply a second coating.

Polishing

Plasticiet can be polished. You can start polishing at 400grid, though the best results are achieved when sanding the material up to 2000. Clean the surface you are going to polish thoroughly. There should be no dust at all on your surface. Use a liquid polishing agent and move your machine in a fluent motion. Use plenty of polishing liquid and some water and adjust your movement speed or speed of your polishing machine accordingly. Don't linger in once place as the material might melt due to the friction caused. It is not advisory to apply Plastishine or varnish after polishing.

INSTRUCTION MANUAL

MAINTENANCE



Safety precaution: Treat your material with care so that it will last a long time.

General info

All of our materials are relatively scratch resistant from regular use. Refrain from scratching the surface with hard or sharp materials such as keys, knives or rocks. Rocks will beat Black Rock, as well as the others indefinitely.

Daily use

We advise you to not directly place any hot items such as pans, a percolator or candles onto these materials as well as items with a sharp or uneven bottom. Always use a coaster for these kinds of objects. Use a cutting board when performing hand labour or when preparing food on your Plasticiet surface. Plasticiet is not a certified food safe material.

Cleaning

Cleaning can best be done with a soft sponge, microfibre cloth or a cotton rag. Use the soft side of a sponge, not the abrasive green side. Apply some water and soap to your surface and wipe it off, then dry it with a cotton cloth.

Organic solvents such as acetone and ethanol should be avoided by any means. Also avoid any aggressive cleaning agents and cleaning agents containing citrus or other acids. Check the label to be sure your cleaning product does not contain any of the aforementioned contents.

Care and repair

If your material starts to wear and you would like to fully rejuvenate it once again, follow the steps provided in the Sanding tab. Here follows a compacted instruction.

Small scratches can be sanded out using a 240 grid sanding paper and light pressure by hand. For the best result, start by using a random orbital sander and 180 grid sanding paper, and work up to 240. Always keep your sanding machine in motion. Sanding can best be done by someone with experience. Deep scratches can be repaired with a filler which matches the colour palette of your product. Sand it accordingly when it's hardened out.

Should your product look dull, you can apply Valma Plastishine to your surface to bring out the colour. Apply with a cotton rag and rub it out after a few minutes.

End of life

Should the day come that you do not want to keep your Plasticiet product anymore then please try to find a new owner by gifting or selling it. If you cannot find a new owner you can either return it to us or dispose of it following your local plastic recycling principles. Please inform us, before returning anything to us.

Good luck and enjoy your product!