



## Frequently Asked Questions about Encaustic & Studio Safety

Below are a few answers to commonly asked questions and tips on safety. Please be sure to always refer to the packaging and the manufacturer's website in case information has changed. *We are an online art store and do not make the items we sell except where noted.*

Please contact us if you have any questions and we will do our best to find a solution for you.

We recommend that if you are new to encaustic that you first take a class in person or online with a reputable teacher. We are familiar with teachers in Canada and the USA and can make recommendations depending on your area of interest.

A good idea is to see what style of painting you are drawn to and then find the best teacher to learn from. Research is your best friend and there are many forums on social media to find the right teacher for you. Choose a teacher with a solid studio practice, who is respected in the encaustic community and recommended by other students, and who teaches in a safe manner.

If you opt to try it on your own first, please be very cognizant of safety.

**The following is a basic set of safety guidelines for working with encaustic when using the iron, stylus, and hotplate. Please follow all manufacturer guidelines.**

**#1 Tip – If it is metal and plugged in it will be hot. Do not touch.**

### The Iron

#### How hot does the iron get?

Low is about 110C (230 F), High about 150C (300 F)

- **Workspace safety & set up – Read the Instructions that come with the Iron**
  - Not a children's toy. Children are never to use unsupervised.
  - Keep all power cords tidy.
  - [Assembling the iron](#)
  - Ensure that you have proper ventilation that pulls the air away from your work area (a reversed fan by a window or door works well)
  - Keep your hot implements at your dominant hand side.
  - Keep your waxes, paper and other cool items on your non-dominant hand side.



- Any left handed students? Adjust cord so that it runs up the handle. See notes at [www.encaustic.com](http://www.encaustic.com) for altering the handle of your own iron.
- Make sure that you have a stack of paper towels under your iron at all times and that you are protecting your area with a newspaper pad.
- When not using the iron rest it on its side with the nose point down and the body resting on the cord. At this angle any trapped wax will run down the channels to the paper towels beneath.
- It is a good idea to have burn cream in your painting kit in case you are burned by the iron. With safe handling, this can be avoided. *Never use your iron when you are not fully alert.*
- Getting Started with the Iron
  - Turn your iron to 2 bars above low – may need to adjust after testing
  - Testing the iron
    - Use Olive Green (23) wax block to test the heat of the iron – wax should run at a medium pace when ready to paint
  - Cleaning the iron
    - Use a folded piece of paper towel to clean all of the channels of the iron. Be sure to include the channel at the bottom where wax gets trapped.
  - When not in use, the iron is to rest on the thick cord side so that the tip is angled down on a stack of paper towels.
  - Before you apply wax, ensure that your iron is in a perfectly flat upside-down position – not tilted forward, back or to the side.

### **Stylus – Read the instructions that come with the Stylus**

#### **How hot does the stylus get?**

Approximately 120 C (250 F)

1. Safety
  - The stylus has a lot of exposed metal - remember with encaustic, that anything metal = heat = OUCH if touched!!!
  - Keep your hot tips that you are not using in a metal tray while they cool
  - Use multiple layers of paper towel to change tips
2. Loading & Cleaning drawing & brush tips



- Think of your stylus like a fountain pen where you need to draw the heated wax onto the surface of the tip to paint with. You can see this very clearly with the drawing tip in the split.
  - When it is time to clean your tips, gently wipe them with some folded paper towel.
    - If they are very dirty, you may need to use a little clear wax, soy wax, or paraffin to help clear out the colour – wiping in between.
3. Changing tips
- The styluses all have screw in attachments. To exchange the tips you can do this hot – with a lot of folded paper towel, or wait until the stylus has cooled and swap out then.
  - If the drawing tip gets stuck – try putting something thin between the prongs and carefully twisting
  - If the other tips get stuck, you may need to turn on the stylus for a moment to let the wax loosen, as when it is cool it can sometimes act like glue.

## **Hot Plate**

### Setting Up Your Workspace

It is always a good idea to protect the surface around the area that you are going to be painting as there will be drips and splashes of wax. Kraft paper or a tablecloth work well. Remember to protect your clothing as well with an apron or wear old clothes.

**Ventilation is very important when you are working with encaustic.** Be sure to have a venting fan or nearby window or door that will allow the fumes to escape. If you are able to have a venting hood or reversed fan directly over your griddle that vents to the outside this is best.

Place your griddle on your dominant hand. You can use a liner of aluminum foil if you do not want to work directly on the surface of your griddle. If you are using a heat gun for fusing, ensure that the cord will not be in your way.

### Choosing a Substrate

When looking for a substrate for this method, you will want something that is absorbent and rigid. It can have a layer of encaustic gesso or be plain. Ensure that the encaustic has something to bond to and that you are able to create a strong base for the rest of the painting.



**Always use a natural bristle brush when painting with encaustic.** Other materials can melt. There are a variety of hairs and brush types to try and you will find out which you like best for the affects you want to do. Brushes can be purchased from the dollar store, hardware store, art store – they just need to be natural and not synthetic. Experiment!

To clean your brushes you will need some paraffin, clear wax, or soy wax. You can switch between colours by cleaning with these products, but once a brush has been used for encaustic it is no good for other mediums.

**Your griddle should be set to about 200° F or below and always have some form of a thermometer nearby.** A surface thermometer is great as is a point and read. Your wax should be liquid with an even consistency. If it is pigmented, be sure that the pigments are evenly mixed. Remember that different paints can have different melting points depending on the brand, ingredients and pigments used. Keep a chart of melting points and never leave your hotplate waxes unattended or allow them to smoke.

Be careful not to contaminate your tins of colour. Once a colour gets in – it is in. Try one brush per tin of colour or thoroughly cleaning your brushes if switching. You can put paint on the griddle as well and work from there and also for color mixing.

Keep paper towels nearby for cleaning the griddle and brushes.

**Always keep an ABC fire extinguisher in your studio and a bucket of water nearby. This is especially important if you are using an open flame, like an Iwatani torch, for fusing.**

**Remember:**

- Keep your hot plate at around 200F /93C
- Always use a hot plate thermometer on your hot plate
- Clean the surface of your hot plate often – never have smoking wax
- Never leave your hot plate unattended



### What is the melting point of wax?

Please note: Any addition of pigments/damar resin will increase the melting point of the wax to some extent.

- **Refined Beeswax:** Pharmaceutical Grade Beeswax. This is the highest quality, clearest wax available due to the extensive mechanical filtering process that it undergoes. (Melting point 143.6-149 °F / 62-65 °C). Flashpoint about 275°C / 500 °F
- **Carnauba Wax:** Carnauba Wax is obtained from the leaves of a palm tree known as Copernica Cerifera, which is also referred to as the "Tree of Life".(Melting point 180.5-187 °F / 82-86 °C)
- **Luster Wax:** this high quality synthetic wax is a good alternative to Carnauba wax because it is whiter and clearer than Carnauba. (Melting point 205 °F / 96 °C)
- **Microcrystalline Wax:** a complex petroleum-based wax, is also more flexible than paraffin (Melting point 170-180 °F / 77-82°C)
- **Paraffin:** Mineral-based wax, which is refined from petroleum, brittle (Melting point 118-165 °F / 48-74°C). Flashpoint about 250 C / 480 F
- **Damar Resin:** is the crystallized sticky sap that oozes from trees found in the East Indies (Melting point ca 250°F / 120°C)

### How hot can a heat gun get?

This depends on the make & manufacture. Please check the box for details.

They can range Low: +482F (+250C) / High: +662F (+350C)

### I love the shellac technique. How do I do this?

Always learn the shellac or crackle technique from a reputable teacher. Never try this inside your house or studio. Do not trust videos on YouTube. Linda Robertson has a great online class for this if you are not near a teacher.

### What is the weight of the blocks/crayons?

One Encaustic Art block is about 11 gram / 0.35 oz

### What are the ingredients of the Encaustic Art International waxes?

- **Beeswax:** It is the basis of all the encaustic paints
- **Paraffin:** Used to decrease the viscosity (make it run more easily when molten).
- **Microcrystalline wax:** This wax type offers adjustment to the melting point and the viscosity of the wax as well as the heat curve that affect the way the wax congeals back into a solid.



- Carnauba wax: Included to raise the melt point, add a little hardness. It also improves the polishing shine of the wax.
- Glycerine Palmitate: Stearic acid is used to harden the wax formulation and is made out of vegetable fats
- Stearate, Silicia: Liquidity improvement, thickening agent.
- Pigments: see <http://www.encaustic.com/products/waxblock/waxblock.html> for more details

**Metallics** are made using mica coated with metal oxide

**Pastels** are made by mixing with white & can lessen light-fastness.

**Neons** are vibrant translucent colours but are not so lightfast as the regular wax colours.

**Mixers** are thicker & more 'colour true' for mixing into new colours.

**For information on Enkaustikos waxes please visit:** <http://www.encausticpaints.com/>

#### **How much area can I cover with one block/crayon?**

1 block = approximately seventeen A6 (4x6") painting cards

#### **Can I use children's crayons instead of Encaustic wax?**

Children's crayons are not developed for use with the Encaustic Art Painting Iron. *There are no refunds or exchanges on irons used with anything but Encaustic Art waxes, medium or pure beeswax.*

#### **Can I use my travel iron?**

The Encaustic Art Painting Iron is made to a high specification with a fine quality thermostat that will operate within a heat band of roughly 15 - 20 degrees Celsius.

Travel irons do not offer the control or predictability that the specially made painting iron does.

#### **Can I use a wood-burning tool?**

A wood-burning tool gets up to more than 300 C / 600 F, much too hot for the wax. *If you use a wood burning tool you must use a temperature regulator with it.*

#### **Which surfaces can I paint on with wax?**

Depending on the technique used, you can paint on:

- Encaustic painting card
- Watercolour paper
- Handmade papers
- Canvas (properly primed for encaustic and braced)



- Door skin
- Ply wood
- Cradled art panels
- Clay board
- Fabric
- Porous marble tiles
- Experiment! But if you are to sell your work please keep in mind the archival nature of your paintings. The wax requires something to adhere to or it can crack, pop or slide off – especially with large temperature fluctuations.

#### **How should I prime my substrate? Depends on the substrate.**

- For paper it depends on what your end application will be.
- If using encaustic paper with the painting iron - no
- If it has already been gessoed with an acrylic gesso, then yes it will need to be covered in the encaustic gesso.
- You can prime wooden panels with one or more layers of clear wax or medium or you can prime them with encaustic gesso.
- Prime with several layers of diluted rabbit skin gesso (labor-intensive!)
- Or use special formulated gesso for Encaustic: Holy Grail from Evans Encaustic or the R&F Encaustic Gesso.
- Note: If you start with several layers of beeswax or medium, on gessoed or un-gessoed substrate, you can always scrape back if you do not like your painting.

#### **Should I varnish my Encaustic paintings?**

- Encaustic paintings do not need a varnish, but you can add a special formulated high damar-resin medium as a topcoat to works on wooden panels.
- Greeting cards can be coated with the Encaustic sealer. Not suitable for fine art.

#### **How do I care for Encaustic paintings?**

- Gently polish finished paintings with soft, lint-free cloth.
- Be aware not to scratch the painting. Surface will harden over time.
- Frame works on paper behind glass, use a mat.
- Do not hang in direct sunlight.

#### **How do I to photograph Encaustic artwork?**

- Try to photograph outside on an overcast day, and then tweak the colours in a photo editing program.
- Best is to set up a photo space with at least two lights to cancel out the glare.





## More on safety

The iron conforms to CE and UL specifications, in keeping with electrical legislation and certification. It is a high quality item. However, careless use in a disorganized work area could cause you to give yourself a light skin burn.



The USA packaging offers a cautionary label for safety legislation requirements. This indicates to a potential user that the products are safe and non-toxic but that in their usage certain caution is required - in this case it is the heated iron plate and molten liquid wax, either of which could cause some burning if improperly managed.