

JESSIE FRITSCH ENCAUSTICS CHEAT SHEET

1. **Definition:** Encaustics are dry pigments suspended in molten refined beeswax and natural resins.
 - a. The word encaustic derives from the Greek word *enkaustikos*, meaning “to burn in”. Each layer of wax must be burned in, or re-heated, to the layer of wax beneath it. The word encaustic refers to the essential process of gently fusing layers of beeswax into one cohesive sheet of wax.
 - b. commercial encaustic paint is made with pharmaceutical grade beeswax that is mixed with damar resin and powdered pigments.
 - c. Damar resin is crystalized tree sap from the West Indies. When added to beeswax the resin increases beeswax’s melting point from 110°F to 120°F, it stops the beeswax from forming a bloom (a natural haze over beeswax), and refracts lights causing eye popping color.

2. Do and Don'ts of encaustic

- You need proper ventilation and electrical to work with encaustic. *See R&F Studio Venting Info*
- Safe working temperatures are between 160°-200°F. Some pigments break down if heated over 200°F.
- Beeswax fumes are toxic over 250°F. Heating wax over this temperature can release highly irritating wax decomposition products like acrolein and formaldehyde. No respirator will protect you from these fumes. It is not recommended to use a torch for fusing. Torching the wax surface can accelerate the decomposition of the wax and cause the pigments to fume.
- I use a Presto electric griddle to heat my waxes. I warm the griddle up very slowly taking about 15 minutes to heat my paints to 180°F. The griddle can over heat very easily. Do not turn it to 200°F when you first turn griddle on. It will get too hot and overheat your wax. When you turn on the griddle on just turn knob until light turns on. Let it sit at that temperature and when the light turns off then turn it up again just until the light turns on. My final resting spot on the griddle temperature is in between the “A” and “R” in the WARM setting. I have surface thermometers and digital thermometers with alarms to insure safe wax heating.
- Encaustic needs something rigid and porous to adhere to. Wood is an ideal support. Paper and canvas can be used if properly supported. Ceramics and stone can also be used. Anything porous.
- Encaustic doesn't mix with acrylics. Acrylics seal off the surface and the wax will not adhere onto the surface. Do not use acrylic gesso.
- To prime your support you can use R&F Encaustic gesso, traditional rabbit skin gesso, Casein, or beeswax itself can be used as a ground.
- Only use natural bristle brushes. Synthetic with melt.

3. Supplies: My favorite suppliers are.

ENKAUSTIKOS www.encausticpaints.com

R&F ENCAUSTICS www.rfpaints.com

Both these sites have great info on safety, painting techniques, and other artist resources.

- a. I get most of my paint supplies and beeswax from Rochester Art Supply ▪ fineartstore.com
Rochester Art Supply Inc | 150 W Main St, Rochester, NY 14614 | 585-546-6509

- *I have been using them for 15 years. They sell all art supplies but specialize in Encaustic. Below lists some of the products I use in my art studio.*
 - Enkaustikos USP Refined White Beeswax

- Enkaustikos Wax Medium (Beeswax and damar resin)
- Enkaustikos Paint
- Enkaustikos Slick wax-cleaning wax.
- R&F Paints
- R&F Encaustic gesso
- Reference books- very large selection

b. Local Encaustic supplier in New London, WI ▪ IschererWaxArt.com

- I purchase my specialized encaustic irons from Jodie Scherer.

c. My sable brushes and carving tools are from Jack Richeson & Co. in Kimberly, WI ▪ richesonart.com

d. I paint on ½ inch thick Baltic birch plywood. I special order a 4x8' sheet from Menards.

e. I purchase DaVinci cradled birch panels from Jerry's Artarama. ▪ jerrysartarama.com

4. **Safety Requirements:** Because encaustic does not require solvents, it is a relatively safe medium to work in.

a. The four safety concerns for encaustic are: Fumes, burns, pigments, electrical.

- Proper cross ventilation needed. *See R&F Studio Venting Info*
- Have access to a sink or a bowl of water to treat burns. Need access to a fire extinguisher.
- Do not eat or drink at your workstation. If pigments are ingested they will cause harm.
- Recommend having at least one 20 amp circuit for an encaustic studio.

5. **Process and Technique:** *See R&F Basic Encaustic Manual*

6. **Care for beeswax painting:** Encaustic is stable until 120°F. Become brittle below 40°F. *See care packet*

a. Encaustic paints are perhaps the most durable form of painting, evidenced by the Egyptian Faiyum funeral portraits, which have survived over 2000 years without cracking, flaking, or fading. Wax has several inherent qualities that allow it to withstand the test of time: it is moisture resistant, mildew and fungus resistant, and unappetizing to insects. Wax paints do not contain oils so they will not darken or yellow with age.

7. **History:** Encaustic painting is one of the world's oldest art forms! The ancient Greeks developed encaustic over 2,000 years ago. Shipbuilders used beeswax and resin to seal the joints and waterproof the hulls of their vessels. Pigmenting the wax gave rise to the decorating of warships. This led to painting pigmented wax onto panels, statues, ceramics, and architecture.

a. In 79 B.C. the artists of Herculaneum and Pompeii were painting most of their murals with wax, using a process called wax emulsion or Punic wax. This cold wax application is described as boiling beeswax with salt water and potassium carbonate, and then bleached by the sun, leaving the wax a paste consistency.

b. Encaustic painting techniques are described as early as the first century AD by Roman authors, such as Pliny the Elder.

- Julius Caesar commissioned an encaustic painting from the artist Timomakos. Archeologists have been able to discover some Roman encaustic paintings, like a painting on slate depicting Cleopatra being bitten by the asp.

c. A large Greek population had established itself in Egypt, in the Faiyûm district, near Cairo following Alexander's conquest in 330 B.C. The Greeks began adapting to the customs of the Egyptians. This included the mummifying of their dead. An encaustic portrait was then placed over the person's mummy memorial. Two cultures merged and created the famous Faiyûm funeral portraits in the 1st and 2nd centuries A.D.

- 600 beeswax portraits have been discovered. The Milwaukee Art Museum has a portrait in its

- permanent collection. The Art Institute of Chicago has numerous portraits.
- d. Encaustic was used in 6th and 7th C. Byzantine icon paintings.
- e. By the Middle Ages encaustic was not as commonly used. Artists began turning to other paint techniques instead of the encaustic paint because the ancient heating process was so laborious. Oil paints, tempera, and fresco became the popular mediums of choice.
- In 1504 Leonardo de Vinci tried encaustic and had some success with small pieces but failed at a large commission piece and left the painting unfinished.
- f. It wasn't until the 20th century that encaustic use was truly revived. With the availability of electrical heating devices encaustic was much more accessible.
- 1920's Mexican muralist Diego Rivera began using encaustic.
 - 1940's Karl Zerbe and was very instrumental in the revival of encaustics.
 - 1950's Jasper Johns becomes the face of contemporary encaustic.
 - Other influential artists that worked with encaustic are Rifka Angel, Lynda Benglis, Pablo Picasso, James Ensor, Robert Delaunay, Antoine Pevsner, and Pedro Pruna.
- g. Today's encaustic artists: Tony Scherman, Joanne Mattera, Martin Kline, Willow Bader, Dale Roberts, Sarah Rehmer, Francisco Benitez, Kevin Frank, Alicia Tormey, and so many more.

8. Favorite Books:

- The Mysterious Fayum Portraits: Faces from Ancient Egypt - Euphrosyne Doxiadis- *This book changed my art path. It is the reason I paint with encaustic.*
- The Art of Encaustic Painting – Joanne Mattera - *This is the book I taught myself encaustic with.*
- Encaustic Art: The complete guide to creating fine art with wax – Lissa Rankin- *I highly recommend this book. It has everything you need to know about all the different techniques and mixed media processes.*
- The Encaustic Studio: a wax workshop in mixed media art – Daniella Woolf
- Embracing Encaustics: learning to painting with beeswax – Linda and William Womak
- The Artist's Handbook of Materials and Techniques - Ralph Mayer
- The Artist's Complete Health and Safety Guide – Monona Rossol

9. Bee facts

- The honey bee makes an average of 10 pollen runs a day.
- Honeybees will usually travel approximately three miles from their hive.
- 10 flowers can yield 1 drop of nectar (one bee can hold one drop of nectar).
- 10 drops of nectar yield one drop of honey.
- 10 drops of honey yield one drop of beeswax.
- 1000 flowers yield one drop of beeswax.
- Over 1/3 of the foods we eat comes from insect pollinated crops. Some of our favorites like coffee and chocolate require pollination.
- Honeybees are responsible for pollinating 80% of fruit, vegetables, and seeds in the U.S.
- Nuts, cotton, hay, and alfalfa grown require pollination by insects.
- The world's oldest bee fossil is 100 million years old.
- Honey is the ONLY food that includes all the substances necessary to sustain life, including water.
- The first beekeepers in History were the Egyptians by 2,400BC.
- Honeybees never sleep.
- Out of 20,000 species of bees, only four make honey.
- Wisconsin has 500 native species of bees.
- Honey bees fly at 15 miles per hour.
- A bee will only produce approximately 1/12 teaspoon of honey in her lifetime.