



CARBORUNDUM MEZZOTYPE

dark field & reductive techniques



with **Akua™ Carborundum Gel**, a platemaking medium

July 2017



AKUA™ CARBORUNDUM GEL

The **Akua™ Carborundum Gel** for platemaking is used to create collagraph printmaking plates. This ready-to-use platemaking gel offers a reliable medium that delivers fine, sharp detail and a uniquely textured surface that yields rich, velvety areas of color.

What is Carborundum Print/Platemaking?

Carborundum printmaking is a collagraph process in which the image is created directly on the plate by applying an abrasive grit (Carborundum) mixed with an acrylic medium or glue. Once dried, it forms areas of texture or line which is then inked intaglio, relief or both. The plate is printed with an etching press or by hand with an Akua™ Pin Press in the same manner as other printmaking plates.

Since the carborundum mixture is built up on the plate, the paper embosses when going through the press creating a rich, dense surface. The plates can be printed many times.

Printmakers have been experimenting with methods for making carborundum prints for decades. Akua™ Carborundum Gel improves results by offering a formulation that is consistent and reliable. Carborundum Gel is performance-tested, so printmakers can rely on the consistency of this platemaking medium from start to finish. As a result, prints will be strong and vivid, each and every time.

There are numerous ways of using the Carborundum Gel. These instructions will focus on dark field and reductive platemaking techniques.





DARK FIELD CARBORUNDUM TECHNIQUE

DARK FIELD is a subtractive method where Carborundum Gel is applied over the entire printmaking plate and the image is created on the plate by removing the medium with various tools. Once the plate is made, it can be printed many times yielding deep, velvety prints. Carborundum Gel plates can be printed by hand with the Akua™ Pin Press or with a traditional etching press.



DARK FIELD

The plate is created by squeegeeing Akua™ Carborundum Gel through 110 silkscreen mesh onto the plate, covering the entire surface. After the Carborundum Gel is applied to the plate it will remain workable in a wet state for approximately 30 minutes. Tools such as cotton swabs, pieces of cardboard, etc. are used to remove the gel while wet to create the image on the plate. Thereafter, the plate is still workable for an unlimited time with the use of hard-edge wooden tools.



MAKING THE PLATE



- Draw a registration template on acetate and attach it to the base of your screen frame unit.
- Once attached, put a drop of water in the middle of your template and lay your Akua™ Prinmaking Plate on top. The water droplet will adhere the plate to the template.



- Apply a generous amount of Akua™ Carborundum Gel to the top of your screen. Make sure the gel spans the entire width of the screen mesh.



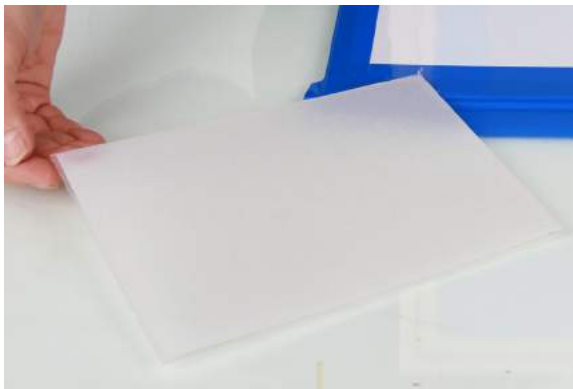
- Squeegee the Akua™ Carborundum Gel through the silkscreen mesh using a silkscreen squeegee.



- Scrape up all residual Carborundum Gel and put it back into the container for reuse.
- Once all of the residual gel has been removed from your screen, rinse your screen under a sink faucet.
- Cleanup must be done immediately to avoid drying and clogging the mesh.



CREATING THE IMAGE



Now, the plate will have an even application of Carborundum Gel. This is your “dark field” that will hold the ink when printing. One has the option of working with the medium to create the image using various tools while the gel is wet, dry, or a combination of the two.

The plate will remain workable in a wet state for approximately 30 minutes. Tools such as cotton swabs, pieces of cardboard, etc. are used to remove the gel while wet to create the image on the plate. Once dry, the plate is still workable for an unlimited time with the use of hard-edge wooden tools.



CREATING THE IMAGE

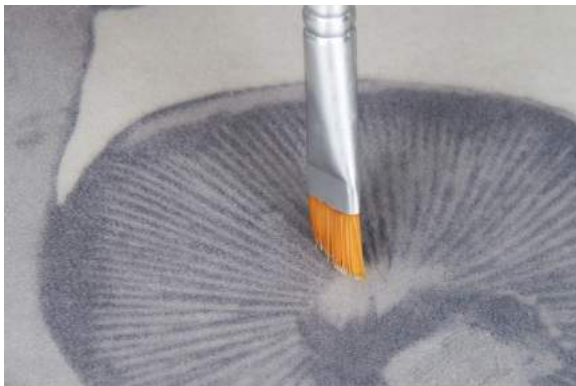
Working Wet



- Use a rag to create soft, broad marks and remove wide areas of Carborundum from the plate.



- Cotton swabs can be used to create small, soft marks and tonal effects by removing varying degrees of Carborundum Gel.



- Use a brush to remove the Carborundum Gel while it's still wet. Both soft and stiff brushes can be used to achieve a variety of brush strokes.



CREATING THE IMAGE

Working Dry



- Use a ball burnisher or ball stylus for line and detailing.



- Use the flat edge of a wooden tool for scraping out wider marks.
- Use the pointed edge of a wooden tool for line work.



- Pick off residual, balled up areas of Carborundum Gel as you work and a final cleaning before you print.



PRINTING WITH AN ETCHING PRESS

The **Akua™ Carborundum Gel** plate offers several options for inking methods and techniques. Its unique, versatile surface can be printed intaglio, relief or a combination of the two. Additionally, artists have plenty of room to incorporate monotype, additional stenciling and other printmaking techniques to stretch their vision beyond the Carborundum Gel matrix. Carborundum Gel plates can be printed both by hand with the Akua™ Pin Press and on a traditional etching press.



- Plates may take 1-24 hours to completely dry for printing, depending upon application. A thoroughly dry plate will feel coarse, like sandpaper.
- Apply Akua Intaglio™ Ink with a heavily loaded Speedball® Soft Rubber Brayer to prevent degrading the surface of the plate.
- Press brayer firmly, forcing ink into the grooves.
- A brush can also be used to apply the ink to selected areas on the plate.



- Intaglio wipe the surface of the plate with Akua™ Wiping Fabric. The soft texture of this fabric is ideal for wiping these plates.
TIP: Clean up the highlight areas using a cotton swab.



- Print with an etching press on damp printmaking paper.



PRINTING BY HAND AKUA™ PIN PRESS



- For printing by hand with the Akua™ Pin Press, your Akua™ Intaglio ink needs to be very loose. Add Akua™ Blending Medium as needed to make your ink loose.



- Your ink should be falling off your ink knife when properly mixed or modified for hand-printing.



- Apply Akua Intaglio™ Ink with a heavily loaded Speedball® Soft Rubber Brayer to prevent degrading the surface of the plate.
- Press brayer firmly, forcing ink into the grooves.



PRINTING BY HAND AKUA™ PIN PRESS



- Gently intaglio wipe the surface of the plate with Akua™ Wiping Fabric. The soft texture of this fabric is ideal for wiping these plates.
- A heavy application of ink on the plate is needed for printing by hand.
- We recommend using a light table as your inking surface for stronger visibility.



- After wiping the plate with the Wiping Fabric, clean the highlight areas using a cotton swab. This will prevent overwiping the dark areas of the plate. The aid of the light table will help you see the open areas. If you do not have access to a light table, hold your plate up to a window.



- A **ready-to-print** plate should look as shown here, **dark and heavily inked**.



PRINTING BY HAND AKUA™ PIN PRESS



Print with the Akua™ Pin Press on paper that has been dampened several hours ahead of time in a damp pack. The paper should be very soft, but not wet.

- Once you have created your image, place the plate on a level surface.
NOTE: Tempered glass is recommended as a press bed.
- Lay your paper onto the plate.
- Gently place the Pin Press on the center of the paper.
- Using heavy pressure, place the palm of your hands on the flat side of the crescent-shaped handles.
- Roll completely off the edges of the plate from all directions (horizontally, vertically and diagonally) to ensure even coverage.

See our [Akua™ Pin Press User Guide](#) for details.



CLEANING THE PLATE



- When cleaning your Akua™ Carborundum Plate, it is extremely important to be mindful that the surface can be disrupted with vigorous, rough scrubbing.



- To gently clean your plate, lightly dampen a VERY soft rag, like micro fiber, with a small amount of liquid dish soap and water.



- Continue to gently wipe your plate until no more ink comes off onto your rag. Some staining may occur.
- Though durable for printing, Carborundum Gel plates have a delicate surface and should not be scrubbed or immersed in water.

NOTE: All surfaces can be cleaned with soap and water

TIP: After printing, clean the remaining residue of ink off the plate by printing ghost impressions with Transparent Base. This will not only offer you prints in a lighter version but it will reduce the possibility of the plate breaking down from excessive cleaning.

AKUA CARBORUNDUM GEL DARK FIELD / REDUCTIVE TECHNIQUE TIPS & TRICKS

Selecting silkscreen mesh for dark field

- Speedball's 110 monofilament fabric will offer the best carborundum gel coverage on the plate.

Squeegeeing Carborundum Gel onto printmaking plate

- If you do not have a silk screen frame, simply tape the 110 monofilament fabric down to a smooth table on top of your plate. The tape will serve as your "hinge", and the frame is not necessary in this case.

Creating and proofing the plate

- To facilitate stronger visibility while drawing into the carborundum plate use a light box with an image placed below. If working spontaneously, place a sheet of black paper below the wet or dry carborundum plate or roll and wipe Akua Intaglio ink on the DRY carborundum plate

Paper handling suggestions

- For hand printing with the Akua Pin Press, soak the paper in a damp pack (sealed plastic bag) for 3-24 hours. The paper needs to be very soft (NOT wet) and evenly dampened.
- For printing with an etching press, soak the paper in tray of water approximately 20 seconds and blot thoroughly before printing. Paper must be evenly dampened and not wet.

Note: These tips are based on using Arnhem 1618 printmaking papers. When using other types of printmaking papers soaking times may vary.

Achieving Rich Print Results

- For hand printing with the Akua Pin Press, avoid using too much Akua Blending Medium to prevent the prints from drying with a hazy appearance.
- For printing with an etching press, avoid using too much printing pressure to prevent the prints from drying with a hazy appearance. Also, thoroughly blot or colander the paper by running the paper through the press before printing.

TROUBLESHOOTING

Paper is sticking to the plate when printed with an etching press

- Paper was too damp.
- Carborundum on plate was not dry yet.
- Too much pressure on etching press.

Carborundum Gel comes off when cleaning the plate

- Clean more gently.
- Use a softer rag.
- Do not immerse in water.
- Do not wash under a faucet.

Result print has random, small, dark spots

- Check plate for built-/balled-up areas of residual Carborundum Gel and remove as needed (see page 7).

Scratch marks and areas of lifting are occurring while inking

- Use a soft rubber brayer for inking. Hard inking tools can damage the plate surface.

For more information on Akua Inks and products, see available resources on our website:

[Akua™ Inks User Guide](#)

[Akua™ Pin Press User Guide](#)

[Akua™ Carborundum Gel Introductory Guide](#)

[Akua™ Carbodundum Gel FAQ's](#)

Technical support

e: support@akuainks.com

Supply List for Dark Field / Reductive Carborundum Techniques

Materials

- Akua™ Carborundum Gel
- Akua™ Printmaking Plate
- Speedball® Silkscreen frame with 110 Monofilament mesh
- Speedball® silkscreen Block Out tape
- Speedball® Squeegee
- Akua Intaglio™ Ink
- Akua™ Blending Medium (if hand printing with the Pin Press)
- Speedball® 2" Soft Rubber Brayer
- Akua™ Wiping Fabric
- Arnhem 1618™ Printmaking Paper

Studio Equipment

- Etching Press or Akua™ Pin Press for hand printing
- Sink with running water to rinse mesh

