



Black Jack Clay™ (SS-2) Natural Pottery Clay Information, Techniques & Tips

Blackjack Clay is a stoneware kiln fire clay made from a blend of various natural clays and minerals found in East Texas. Blackjack Clay is chocolate brown when wet, but fires to a soft tan color. This clay is great for modeling, hand-building and throwing. This clay is good for beginners as well as professional artists.

Characteristics

Firing range: Cone 6-8 (2269F-2320F)

Wet color: chocolate brown

Firing color: soft tan

Texture: smooth

Water content: 17-19%

Avg shrinkage at Cone 6: 8%

Avg water absorption at Cone 6: 12%



Drying Guidelines

- Allow finished clay pieces to air dry to a bone dry state. Drying time varies depending on the thickness of the piece and the surrounding environmental conditions. Bone Dry clay is where as much water as possible has evaporated from the clay piece. If you hold it to your cheek, it will seem dry instead of cold and damp; it will look and feel chalky and is very fragile. It is at this stage that clay pieces are fired in the kiln.

Keys to Optimal Drying

1. **Uniform Drying** Let clay pieces dry slowly. Avoid exposing them to direct heat sources or drafts to minimize the risk of cracking.
2. **Delaying Drying** For large pieces, cover them with partially open plastic sheets so that moisture can escape slowly.
3. **Flat Pieces** When working with tiles or slabs, place a flat weight on top to prevent warping.

Firing

- Bisque fire in kiln to cone 04
- Glaze fire in kiln to cone 6-8



Finishing Options

- **Glazing** - The clay used in mid-fire ceramics is called stoneware. If appropriate glazes are used, the works produced will be vitrified and safe to use for dinnerware. Apply glaze to bisque-ware according to manufacture's guidelines. Glaze can be applied by brushing or dipping. After firing, the clay pieces will be non porous, waterproof, chip-resistant, and oven-safe.

*TIP: For glaze firing, leave the bottom of the piece unglazed so it does not stick to the kiln shelf. If you wish to glaze the bottom of a piece, set it on stilts to keep it off of the kiln shelf surface.



- **Burnishing** - smoothing clay with a stone, plastic bag or a finger to give it a smooth, polished finish.

- **Sgraffito** - the act of carving through one layer of clay or underglaze to expose a different colored clay below it.
- **Staining** - adding pigments that come from minerals and oxides over the surface of the clay.



Tools Needed

- Our **Activ-Tools Clay Tool Set** includes essential tools for getting started with clay modeling. These tools allow you to cut, sculpt, shape, embellish, texture, scribe, and add fine details to the clay. They are easy to clean and dishwasher safe, making them perfect for all skill levels. The Activ-Tools Clay Tool Set will give a professional finishing touch to all your clay projects.



The set includes the following tools:

Flat Edge Ideal for creating indentations, concaving surfaces, and clay cutting.

Modeling Used for smoothing, contouring and pattern decoration.

Rough Cut Blade Perfect for scoring, texturing, making patterns, and creating lines.

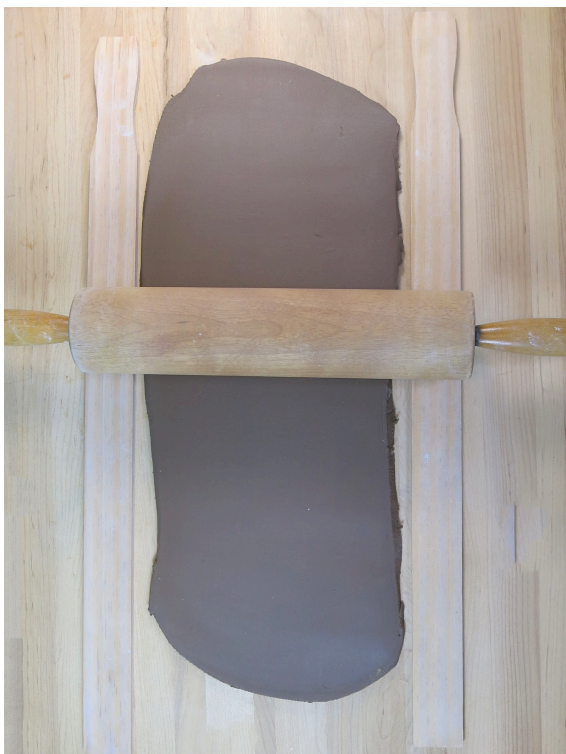
Needle Point Great for making dots, holes, fine details and lettering.

Smooth Cut Blade Used for smoothing, and cutting clay.

Roller Cutter Useful for cutting out shapes, slabs and tracing patterns.

- **Rolling Pin** Our Clay Roller Kit is useful for rolling out clay. The rails provide the ability to roll the clay to the desired thickness - ensuring an even surface area for slabs, stamping or texturizing. *When using the Clay Roller Kit, if your clay sticks to the board, spread a thin layer of cornstarch on the board or lay parchment paper on the surface prior to rolling.

A wooden rolling pin and wood dowels or sticks can be used to roll flat slabs of clay for slab constructions or relief sculptures.



Specialty Tools

- **Potter's Wheel** A machine used in shaping (known as throwing) of clay into round pottery. The wheel may also be used during the process of trimming excess clay from leather-hard clay forms.



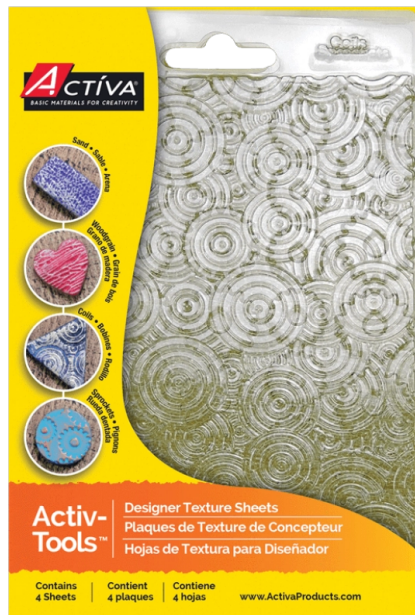
- **Banning Wheel** The Sculpting Wheel from ACTIVA is an excellent choice for pottery enthusiasts, as it can hold up to 30 pounds and features a 10 3/4 inch diameter. Its ability to rotate projects 360 degrees makes it versatile for various sculpting needs. It is turned by hand and used for finishing or decorating pottery. The low base design allows for convenient storage, while the free-wheeling ball bearing action ensures smooth operation. Constructed from industrial-grade plastic, it is rust-proof and resistant to stains, promising years of reliable use. Cleanup is a breeze with just soap and water, making it suitable for both adults and children.



- **Shape Cutters** The Activ-Tools: Geometric and Designer Clay Cutters help create clay shapes to embellish larger projects, or use the cutters to create freestanding clay projects.



- **Texture Sheets** Add detail, dimension, and texture to any clay project with the Activ-Tools™ Designer Texture Sheets. This set of four clay texture sheets includes the following designs: Wood grain, Sand, Coils, and Sprockets. To use, simply spread a thin amount of cornstarch on a piece of clay, lay one of the Designer Clay Texture Sheets on top, and gently roll flat to create an impression. These Designer Clay Texture Sheets pair perfectly with our Clay Roller Kit.



Other Suggested Tools

Loop, needle, wire, clay cutter, metal and rubber ribs, ribbon, trimming, felting knife, rasp, sgraffito loop, hole piercer, paddle, sponge, extruder, slip trailer, bat, scale, kiln, cones, and stilts.

Working Techniques

1. Wedging

The process of pushing and pressing on clay to expel all air bubbles trapped in the clay and to bring the clay to a uniform, consistent moisture level.

Before starting, wedge the clay to achieve a uniform consistency and enhance its plasticity.

2. Maintain Moisture

If the clay becomes less flexible while working, slightly moisten hands. Avoid applying water directly to the clay to prevent over-saturation unless throwing on the potter's wheel.

3. Joining Pieces

When joining two pieces, ensure that both have a similar moisture (hardness) level. Variations in shrinkage can cause the pieces to separate while drying. To secure the pieces together, score the surfaces and use slip.



***Slip** - is liquid clay, it is used to join pieces of clay together like glue, it can be poured into molds or used for decorating.

***TIP:** To make slip: Break soft clay into small pieces and place in a shallow container. Allow the clay to fully air dry into hard chunks. Add enough water to cover the dry clay pieces. The clay will break down absorbing the water and become mushy. Mix the mushy clay together and apply over scoring marks with a brush.



Stages of Clay

Slip - liquid clay.

Plastic - clay that is wet enough so that it can be shaped into forms by hand or on the wheel without breaking.

Leather Hard - clay that has started to dry but has some flexibility. It can still be carved, cut and joined together, but it is hard like a block of cheese.

Bone Dry - clay where as much water as possible has evaporated out of the piece. If you hold it to your cheek it will seem dry instead of cold and damp. It looks and feels chalky and is very fragile. It is at this stage that clay pieces are fired in the kiln.

Greenware - bone dry clay pieces that have not been fired in the kiln.

Bisque-ware - an unglazed clay piece that has been fired in the kiln once at a low temperature and is ready to be glazed.

Glaze-ware - a clay piece that has been fired twice, once in a bisque firing and a second time in a glaze firing. It has a glossy or matte glasslike finish and a smooth texture.

Storage

- Once the clay package is opened, wrap leftover clay in a tightly sealed plastic bag to prevent it from drying out. Clay pieces can be stored in a damp box while in the process of sculpting to keep it moist and workable.



Softening

- If the clay hardens but remains moist, soften it by kneading it with dampened hands. If the clay has hardened during storage, but is still moist, it can be softened again by wrapping it in a moist towel for 24 hours.



Techniques

Wheel Throwing

The process of creating a pot on the potter's wheel using one's hands, water and throwing tools.



Modeling and Sculpting

The act of creating 3-dimensional forms out of clay. Clay can be pulled, pinched or joined together.

- *Additive* - Is the process of joining pieces to create a form.
- *Subtractive* - Is the process of removing pieces to create a form by carving it off.



Hollowing

Removing the inside clay from a solid form.

Pinching

The process of squeezing a piece of clay between the thumb and forefingers to make a hollow shape. Pinch pots are made by pinching.

Coiling

Rolling or extruding a cylinder of clay to create a long snake like form. Coils can be stacked on top of each other to create pots or sculptures.

This technique allows for a variety of shapes and sizes, making it a versatile choice for artists. The potter can also incorporate textures and patterns by manipulating the surface of the coils, adding creative flair to the finished piece.

Slab Construction

Rolling clay into a flat sheet with either a rolling pin or slab roller. Clay slabs can be formed into pots or sculptures at the soft stage or the slabs can be left to stiffen and assembled when leather hard. Flat slabs can be used for relief sculptures or as a base for other sculptures.

Extruding

Creating long, solid and hollow clay forms with an extruder using a variety of machine dies. Extruders are great for making coils for construction, decorating, handles and hollow forms.

Relief

A sculpture that projects from a flat surface. Sculptural elements have been carved into or attached onto the flat surface. Reliefs are meant to be viewed from the front.

Stamping

Impressions can be made into the clay using plastic, wood, rubber, metal, and ceramic stamps.



*NOTE: Dusting a light layer of corn starch over the area to be stamped will help the stamp not to stick to the surface of the clay.

Carving

Using a tool to remove small clay pieces from a larger whole piece in order to create a form or finished artwork.



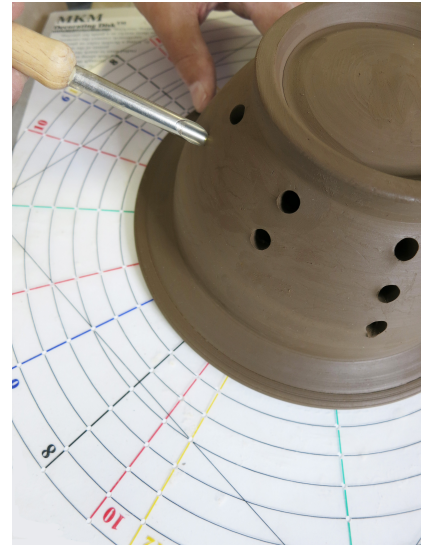
Fluting

Using a carving tool to extract ribbons of clay from the surface of the piece.



Piercing

Cutting or poking holes through a piece of clay.



Slump Molding

Draping a slab of clay into a form to shape it. Molds can be made of plaster, wood, or bisque fired clay.

Hump Molding

Laying a slab of clay over the top of a form to shape it.



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