

Clay Bodies – Wood, Salt, Soda

LIGHT WOODFIRE

Helmer Kinose	
Helmer kaolin.....	65
Custer Feldspar.....	20
Flint.....	15
Epsom salt.....	0.25
Sand.....	to taste

418 Helmar Body

Helmer kaolin.....	60
Old Mine #4 ball clay.....	10
Flint.....	5
Custer Feldspar.....	20
Sand 70 mesh.....	10
Epsom salt.....	0.25

Pioneer Day Body

Foundry Hill Cream.....	35
Helmer kaolin.....	45
Custer feldspar.....	20
China Sand.....	10

Equal Parts

Tile 6.....	20
Old Mine #4 ball clay.....	20
APG fireclay.....	20
Custer feldspar.....	20
200 mesh silica.....	20

Deadhead Wood

Helmer.....	50
Old Mine #4 ball clay.....	15
Custer Feldspar.....	20
200 mesh flint.....	15
#30 Silica Sand.....	10
#70 Silica Sand.....	10
Epsom Salts.....	.25

Medium Dark Body

Goldart.....	40
Old Mine #4 ball clay.....	40
Custer Feldspar.....	10
200 mesh flint.....	10

SALT-WOOD CLAY BODY		
SPAR	10	PARTS
AP GEN.	70	
FIRECLAY	10	
BALL	10	
#6 TILE	20	

Sam's Stoneware Body (Cone 10-12)

Custer Feldspar	30 lb
6 Tile	20
Foundry Hill Creme	50
Hawthorne Bond	20
Kentucky Stone	50
XX Sagger	50
	220 lb

DARK WOODFIRE

EP626

A.P. Green Fireclay	30
Pinelake	30
Redart	30
Mullite	5
Pyrophyllite	5

Grey Imbe Modoki

Foundry Hill Cream.....	60
Kona F-4 Feldspar	12
Custer Feldspar.....	19
200 mesh flint.....	3
Laterite.....	6

Yellow Imbe Modoki

IMCO 400.....	45
Kona F-4 Feldspar	12
Custer Feldspar.....	30
200 mesh flint.....	21
Redart.....	7

Salt-Wood Clay Body (Cone 7-10)

Feldspar	10 parts
A. P. Green Fireclay	70
Ball Clay	10
Kaolin (6-Tile)	20
	110 parts

Simon sometimes adds 10 parts fine grog.

HELMER BODY

HELEN

HELMER	50
SPAR	25
FLINT	15
BALL	10

20 MESH GROG - TO TASTE

TEMPLE WOOD BODY

G-200 10

GOLDART 40

REDART 20

XX SAGGER 40
FIRECLAY 110

KAREN KARNES SALT CLAY — COI

White Salt	
Grolleg	48
A.P. Green fireclay	40
Kentucky OM#4 ball clay	20
Feldspar	15
Bentonite	1.5
plus grog or sand	3

Grey Salt	
Jordan	75
A.P. Green fireclay	38
Feldspar	15
Bentonite	1.5
Grog	3

MARTIN WOODFIRE REC.

GRAVEL	12.5	PARTS 14.4
EPK	20	23
#6	25	28.7
XX SAGGER	12.5	14.4
PYRAX	15	17.24
BENT.	2	2.3
		27 PARTS.

IRON-BEARING CLAY BODIES

Dark Red Stoneware

(Cone 6-14)

Custer Feldspar	10%
Cedar Heights Redart	35
Cedar Heights Stoneware	35
Kentucky Ball Clay (OM 4)	20
	100%

This is a reliable body with very good throwing properties. It can be fired to just about any temperature. In the back of the anagama, this

Martin Wood-Fire Porcelain Body

(Cone 10-11)

Grolleg Kaolin	12.5 parts
Edgar Plastic Kaolin	20.0
6 Tile Clay	25.0
XX Sagger Clay	12.5
Pyrax	15.0
Bentonite	2.0

Baur Salt/Wood Orange Slip

(Cone 10; reduction)

Borax	5.7%
Zircopax	10.5
Edgar Plastic Kaolin	41.9
Kentucky Ball Clay (OM 4)	41.9
	100.0%

Purple Earthenware

(Cone 5-10)

Custer Feldspar	10%
Nepheline Syenite	15
Cedar Heights Goldart	20
Cedar Heights Redart	40
XX Sagger	15
	100%

Be careful of how hot you fire this clay! It looks great in the back of the kiln and can go as hot as Cone 10, depending on the form. The surface is a lustrous purple with black flashes and golden ash deposits. The fine particles of this clay body make it wonderful to throw.

Yellow Porcelain

(Cone 8-14)

G-200 Feldspar	25%
Cedar Heights Redart	5
EPK (Edgar Plastic Kaolin)	25
Yellow Banks 101 (dark)	25
Silica (Flint)	20
	100%

Add: Bentonite 1%

Mark Hewitt's Clay Body

cone 10 reduction/wood fire

Hawthorne Bonding Clay	15.0%
Foundry Hill Cream Clay	20.0
Local Clay #1	10.0
Local Clay #2	40.0
Potash Feldspar	7.5
Grog	7.5
TOTAL	100.0%

This is a very interesting body. Depending on its location in the kiln, it can look totally different in the same firing. At Cone 8 in the back of the kiln, it is a muted dark yellow with nice orange flashing and crystal growth. However, at Cone 14 in the front of the kiln, it is a bright sunshine yellow with green ash deposits and purple flashing.

LIGHT-COLORED STONEWARE CLAY BODIES

Speckled Stoneware

(Cone 6-13)

Nepheline Syenite	14%
Cedar Heights Goldart	40
EPK (Edgar Plastic Kaolin)	16
Tile 6	27
Coarse Beach Sand	3
	100%

This clay looks similar to Shigaraki clay, with bright orange flashing and small glassy burn-outs of coarse material. It was inspired by Gail Nichols' soda-firing clay body and is one of the most dramatic clays I use. It is difficult to throw and trim because of the coarse sand, but the burn-outs can be spectacular next to drippy ash deposits. (Some suppliers have beach sand for land-locked potters).

Gray Stoneware

(Cone 8-14)

Custer Feldspar	10%
Cedar Heights Goldart	40
Cedar Heights Stoneware	20
Kentucky Ball Clay (OM 4)	30
	100%

Gray is not often a color desired by wood firers, but I find it to be quite beautiful for certain forms. The surface of this clay can be quite dry in the back of the anagama, but also can have surprisingly nice flashing variations. If fired hotter than Cone 10, it turns a beautiful golden brown with green and yellow ash runs. This is the best throwing clay body that I have tested to date.

White Flashing Stoneware

(Cone 6-14)

Nepheline Syenite	25%
Cedar Heights Stoneware	10
Coarse Fireclay	15
EPK (Edgar Plastic Kaolin)	30
XX Sagger	20
	100%

This is my all-time favorite clay body for wood firing. The surfaces range from delicate salmon and peach matt to bright fiery reds. It throws very nicely and can be fired anywhere through-

Temple Wood Body

(Cone 11)

G-200 Feldspar	10 lbs.
Cedar Heights Goldart	40
Cedar Heights Redart	20
Foundry Hill Stoneware	40
	110 lbs.

A silky chocolate body suitable for firing in an anagama, wood or salt kiln.

PORCELAIN CLAY BODIES

Helmer Porcelain

(Cone 8-14)

G-200 Feldspar	25%
Helmer Kaolin	50
XX Sagger	10
Silica (Flint)	15
	100%

Helmer kaolin is particularly well suited for wood firing. It has to be fired to at least Cone 8 to avoid dry, melon-skin surfaces, but develops dramatic flashing patterns at higher temperatures. The smooth surface of this fine-grained clay will turn a variety of colors, including orange, red, brown and yellow.

Soda-Fluxed Porcelain

(Cone 6-14)

Nepheline Syenite	24%
Grolleg Kaolin	29
Tile 6	24
XX Sagger	14
Silica (Flint)	9
	100%

Add: Bentonite 1%

This recipe was inspired by a clay body published in Jack Troy's *Wood-Fired Stoneware and Porcelain*. From Cone 6-9 in the back of an anagama, it develops intensely flashed surfaces that reflect the flame path along the piece. Toward the front of the kiln, this clay is self glazing, producing glassy whites and oranges. It has a great tendency to trap carbon and can turn jet black if in contact with coals.

Flash 'N' Glass Porcelain

(Cone 6-14)

Custer Feldspar	10%
Nepheline Syenite	15
Cedar Heights Redart	5
EPK (Edgar Plastic Kaolin)	25
XX Sagger	25
Silica (Flint)	20
	100%

In an effort to formulate a body that developed nice flashing and a glazed surface, I decided to include both potash and soda feldspars, as well as a little iron-bearing clay. The nepheline syenite lowers the temperature enough to make this clay look great in the back of wood kilns. The Custer feldspar encourages pinks, oranges and reds. This clay will usually be glassy if directly hit by flames.

JOHNSTON STONEWARE CLAY BODY

100 lbs.	Missouri Fire Clay
12 lbs.	Custer spar
10-15%	Fine grog for handbuilt

JOHNSTON PORCELAIN CLAY BODY

55 lbs.	Grolleg
15 lbs.	Flint
15 lbs.	Pyrophyllite
22 lbs.	Custer spar
3 lbs.	Bentonite
10%	Fine Molochite for hex

Stoneware/Salt Body (Cone 8-10)

A.P. Green Fireclay	10 pounds
Cedar Heights Goldart	50
Kentucky-Tennessee Ball Clay (M-377)	30
Tennessee Ball Clay (SGP 1)	20
Potash Feldspar	10
Grog	10
	130 pounds
Add: Red Iron Oxide	300 grams

Sculpture Body (Cone 8-10)

A.P. Green Fireclay	100.00 parts
Tennessee Ball Clay (SGP 1)	7.00
Grog	20.00
	127.00 parts
Add: Red Iron Oxide	1.25 parts

**Stoneware Salt Body
(Cone 10)**

Kona F-4 Feldspar	50 lbs
Barnard Clay	10
Cedar Heights Goldart	180
Hawthorne Bond (35 mesh)	180
Tennessee Ball Clay #5	60
Pyrophyllite (Pyrotrol)	20
Silica (Flint)	20
	520 lbs

RECIPES**Stoneware Body
(Cone 9-10)**

Custer Feldspar	12 lbs.
Missouri Fireclay (Chicago Wellsville)	100
	112 lbs.
For a handbuilding body, add 10-15 lbs. fine grog.	

**Porcelain Body
(Cone 9-10)**

Custer Feldspar	22 lbs.
Bentonite	3
Grolleg Kaolin	55
Flint	15
Pyrophyllite	15
	110 lbs.

Add 10 lbs. Molochite for handbuilding.

**Grolleg Porcelain Body
(Cone 8-13)**

Custer Feldspar	50 lb
Bentonite	4
Grolleg Kaolin	110
Flint	50
	214 lb

**Helmar Light Stoneware Body
(Cone 9-11)**

Custer Feldspar	20%
Helmar Kaolin	65
Flint	15
	100%
Per 100-pound batch, add 4 ounces Ep- som salts.	

OESTREICH STONEWARE cone 9-10

Custer Feldspar	30.0
Gold Art	100.0
A.P. Green Fireclay	100.0
Ball Clay	50.0
70 mesh Sand	30.0
Red Iron Oxide	1%
Grey color. Good for salt firing	

**Salt-Glazing Body
(Cone 9-10)**

Potash Feldspar	2.5 %
Cedar Heights Goldart Clay	40.0
Kentucky Ball Clay (OM 4)	15.0
Narco Fireclay	40.0
Flint	2.5
	100.0 %

For a darker clay body, add 5% Cedar Heights Redart.

**White Soda Body
(Cone 10, reduction)**

Custer Feldspar	25 %
Edgar Plastic Kaolin	25
XX Sagger Clay	25
Flint	25
	100 %

Add: Bentonite 3%

Fires off-white in reduction; develops orange-peel surface and light peach blush with soda.

ORANGE SALT/SODA CLAY BODY

Tile 6 (kaolin)	30 parts
EPK	20
Goldart	40
G200 Feldspar	6
Flint	4

7. ERSATZ BIZEN BODY #2

70	Old Hickory Ball Clay
20	Foundry Hill Cream
10	Custer (potash) feldspar

6. ERSATZ BIZEN BODY #1

80	Old Hickory Ball Clay (or other ball clay)
20	Redart (earthenware) clay

**Schwieger's Stoneware Body
(Cone 9-12)**

Custer Feldspar	10%
Hawthorne Bonding Clay	70
Kentucky Ball Clay (OM 4)	15
Fine Grog	5
	100%

For wood firing.

**Wood/Soda Stoneware Body
(Cone 8-10, oxidation or reduction)**

Custer Feldspar	20 lb
Ball Clay	25
Fireclay	50
Kaolin	50
Stoneware	50
Fine White Sand	10
Medium Grog	10
	215 lb

**East Creek Porcelain Body 1
(Cone 10)**

Custer Feldspar	20.0%
Grolleg Kaolin	60.0
Flint (140 mesh)	12.0
Flint (320 mesh)	8.0
	100.0%
Add: Bentonite	5.0%
Pyrex	0.2%
Veexum T	0.3%

Salt Body

A.P. Green Fireclay	200 parts
Ball Clay (Bandy Black*)	50
Ball Clay (C&C*)	50
Sagger Clay	100
Potash Feldspar	25
Flint	25
Silica Sand	25
	475 parts

**4. STEVE DENNIS' WHITE
STONEWARE**

35	Grolleg Clay (English)
15	Georgia Kaolin
15	Tennessee XX Sagger Clay
12	Tennessee Ball Clay #5
10	flint
10	potash feldspar
8	sand (optional)
2	bentonite

8. YELLOW BANKS BODIES

Body #1

66.3 #401
33.7 #101
16.0 Custer

The relatively high percentage of iron-bearing #101 makes this clay mature in the C/4-8 range, where it registers both contact and atmospheric flashing in red to gray tonal range, similar to Ersatz Bizen bodies, above. Documents color changes when cooled in close proximity to charcoal.

Body #2

80.3 #401
19.6 #101
9.9 Custer

Similar to Yellow Banks #1, but somewhat lighter-burning, favoring gray and blue-gray tones due to the reduced feldspar and iron-bearing clay content.

The working properties of both bodies are very similar to those of porcelain, and make each a good choice to combine with light-burning white stonewares or porcelains.

9. ALL-PURPOSE FINE-GRAINED STONEWARE

20 XX Sagger
20 Kentucky Stone
20 Foundry Hill Cream
20 Old Hickory Ball Clay
10 Yellow Banks #101
10 Custer (potash) feldspar

10. OLSEN PCR (RED)

West Coast U.S.

34.5 Lincoln 60 Greenstripe
17.1 Missouri fireclay
13.8 Superblend ball clay
9.2 silica
4.6 #420 lone grog
4.6 #412 lone grog
9.2 Kingman (potash) feldspar
6.9 Red mesa clay (omit for white body)

Omit or reduce grog content for tableware.

11. OLSEN SCULPTURE BODY

40.0 Lincoln Greenstripe
20.0 #400 mesh grog
17.5 OM4 ball clay
10.0 potash feldspar
3.75 Red Mule clay
3.75 Red Mesa clay
2.5 sand

12. MID-RANGE PORCELAIN-TYPE BODY (C/6-9)

36.8 EPK (kaolin)
24.5 nepheline syenite
14.3 Tennessee ball clay #5
19.1 flint
5.1 bentonite

GROLLEG BODY RJ

Color	WHITE	Handb
Ingredient		Amount
GROLLEG KAOLIN		51.19
CUSTER FELDSPAR		23.27
SILICA		11.63
Pyrophyllite		11.63
BENTONITE		2.28
Totals		100.00

Also Add:

200 Mesh Molochite 10.00
30-80 Mesh Molochite 10.00

Randy Johnston Stoneware

Color	Ingredient	Amount
	A. P. Green Fireclay	64.41
	Custer Feldspar	12.45
	48 mesh Grog Kyanite	12.94
	100 mesh Kyanite	3.83
	OM-4 Ball Clay	6.38
	Totals	100.00

Also Add:

EPK 6.38

2. STONEWARE BODY

50 stoneware clay
20 ball clay
15 sagger clay
10 potash feldspar
5 flint

5. FINE-GRAINED PORCELAIN BODY

55 Grolleg Clay (English)
25-35 potash feldspar
15-25 flint
1-3 bentonite

FROM SANDY MARTIN

FOR STEVE DAVIS

° HIGH FIRE CONE 9-10 CLAY BODIES - STONEWARE by Val Cushing °

These are plastic clay bodies. The verbal description by each number refers to reduction firing. Generally speaking clay bodies will be a lighter color in oxidation.

CLAYS, FLUXES & FILLERS	1. NO STONEWARE look this body	2. NEVER FAIL GEMERIC STONEWARE, grey brown	3. STONEWARE, orange brown	4. STONEWARE, tan sandy	5. WHEEL, WAX STONEWARE very plastic on the wheel	6. SOFT LASH STONEWARE off white stoneware
KAOLIN			10%	20%		
WILE FIBROUS				10		
EPK						10%
TELMAR						
HAIR CLAYS						
CR C	(14) 9%				25%	
OM4		10%	15			10
XX SAGGER						
TEXNESSEE 10						
STONEWARE CLAYS						
FOUNTAIN	(23.5) 83.5	85	20	40	25	20
FOUNTAIN FILL						
FEEL CLAYS						
AP GREEN	(8) 8	12	15	10	15	10
HAWTHORNE	(33.5) 33.5		15		25	
EARTHSTONE CLAYS						
BARNAID BLACKBIRD	(2) 2		10	10		
TEZELLA RED						
REDART						
FLUXES						
RONA-FELDSPAR	(10) 10	10	10	8	8	12
TALC						
FL LERS						
FLINT	(4) 4	5		2	2	6
ALUMINA calcined/hydrate (200 mesh)						6
Any ball clay can be used in all these bodies - except body 63	Throw very well. Medium brown - dense. Any ball clay may be used. Add 4% more Barnard for a very dark redish brown color. Barnard may be eliminated & 1% 2% added to the Kona F-4 spar for a light tan color.	Any ball clay can be used in this formula. Very reliable.	Forms a satinlike surface in salt and soda. Do not substitute for any of these clays.	Very plastic.	Light gray/cream. Flashes well throughout filings.	Light grey in oxidation to light grey brown in reduction. Shows soda & wood leaching very well.

VC Rev. 594

IS THIS IN PLACE OF 6106? OR FLINT?