Guide to the HyperGlaze X

Glaze Index: automatically updated index of your glaze recipes - click to go to the one you want

Glaze Picture: keep a picture of your glazes here

Glaze Lists: keep lists of your favorite glazes here to easily view or print them

Glaze Calculator: use this to convert molecular unity formulas (UMF) back to a glaze recipe

Glaze Limits: use this window to modify your glaze or compare the unity molecular formula (UMF) of your glaze to typical UMFS of a specific type of glaze

Glazes: keep your recipes here along with notes about the glaze

Index: Use this palette of choices to easily open or close any HyperGlaze window with a click

Glaze Picture: keep a picture of your glazes here

Glaze Limits: use this window to modify your glaze or compare the unity molecular formula (UMF) of your glaze to typical UMFS of a specific type of glaze

Glazes: keep your recipes here along with notes about the glaze

Guide to the HyperGlaze X

glaze windows on screen
The Index window - quick links to HyperGlaze features

Glazes: store glaze recipes & notes here
Glaze Index: click a glaze name to see recipe
Glazes Lists: keep lists of favorite glazes
Glaze Picture: save a picture of each glaze
Glaze Limits: adjust & change unity formula
Glaze Calculator: convert unity formula to recipe
Clays: store clay recipes here
Clay Index: click a clay name to see recipe
Clay Lists: works just like glaze lists
Materials: store ingredient analyses here
Materials Index: click an ingredient name
Help & Preferences: click for help & settings
Utilities: four handy utilities for ceramists
Copyright info: click to see licensing restrictions

Note: almost all of these choices are also available in the Go menu
The Glaze Index window

Click glaze firing range to see glazes for those cones

Click a glaze name to see the recipe for it in the Glazes window

Red glaze names with a + before the name show marked glazes—option click to unmark. Marked recipes can be viewed (using View Marked button on Glaze cards), printed or exported as a group, or added to the Glaze Lists for easy use later.

Click Update Index to sort glazes alphabetically by cone range

Note: Newly added glazes appear initially at the top of the list with an asterisk before the glaze name.

Note: Clay Index window is nearly identical
Glaze Name
Color popup menu
Base glaze recipe
+ buttons: click to add ingredients without typing
Also Add: enter colorants or other additives
Comments: type in your notes about glaze application, mixing, etc.
Health Hazards: shown when glaze is calculated

To Make a New Glaze Recipe Card:
Choose “New Card” from Edit menu

Note: Clays window is nearly identical
Then click Get Current Glaze to show the currently selected glaze recipe here in the Compare Glaze window.
The Complex Search window for Glazes

Choose where to search

Choose Find in the Found Set (Marked Cards) to refine a previous search by looking only in the currently marked cards during the search.

Find and Mark Cards is the most common choice for a first search.

Searches for glazes or clays of a specific cone number

Search for recipes that contain these items:
- Name:
- Thermal Expansion < \(10^{-6/\text{deg C}}\)
- Cone: 10
- Color
- Surface
- Firing
- Testing
- Ingredient:
- Comment:
- Date: > (MM/DD/YY)

Search for clays of a specific cone number

NOTE: you must include at least one item marked in red with an asterisk. These items are not required for searches, but if you enter a search term in this side, recipes will not be marked if they include that term.

simple searches often work best!
**The Glaze Limits window**

- **Limit Cone**: sets the cone number for the colored bars behind the oxide amount bar graph with the approximate temperature below.
- **Surface**: click to change changes the limit values to glaze type: matte or glossy.
- **Est. Thermal Expan**: likely thermal expansion of the base glaze.
- **UMF**: unity molecular formula for this glaze.
- **Mole Ratio OR Wt. %**: click to switch between these two views of the analysis for this glaze.
- **Check box to link silica and alumina amounts so that the Si:Al ratio stays constant when you adjust either the alumina or silica amount**

- **Orig. Cone**: the cone number of the glaze entered (as shown on the recipe card).
- **Get Current Glaze**: grabs the unity molecular formula for the glaze currently shown in the Glazes window and inserts it into Glaze Limits.
- **Get Current Glaze**

- **Click up or down arrow to change the cone of your glaze one cone higher or lower**
- **Limit amounts**
- **Oxide amounts in your glaze - click and drag to change**
- **Option [Alt] click any chemical symbol to see how that oxide affects glazes and colorants**

- **Popup menu of more specific limit formulas**

- **NOTE**: Thermal expansion only includes oxides shown. Click and drag light blue bars to set or adjust amounts. Hold Option/Alt key down and click oxide names for more info on each oxide. Color bars are limit amounts.

- **Choose a Custom Limit**: C10 - Celadon
The Glaze Calculator window

- Enter your choice of ingredients here.
- Click to calculate a recipe from the UMF.
- Click to sort ingredient list for best calculation.
- Click to clear your previous calculation and recalculate.
- Colorants in the original recipe.
- Click a name to add it to the ingredient list.
- Enter a number between 0 and 1 to limit amount of an ingredient (for example, 0.5 would add only half the possible amount).
- Click to combine K & Na amounts.
- Click any chemical symbol to see what ingredients supply it in the Sources of Ceramic Oxides.
- Click to have calculation ignore trace oxide amounts.
- Click to grab current recipe in the Glazes window and enter the ingredients and UMF here.
- Click a name to add it to the ingredient list.
- Click after calculating to convert the recipe to a percentage batch.
The Materials Index window

Materials is full list which also includes clay analyses. Clays is a sublist of just clay analyses.

Click to see an ingredient and its analysis in the Materials window.

Red material names with a + before the name show marked materials - option (ALT) click to unmark.

Marked analyses can be viewed (using View Marked button on Material cards), printed or exported as a group.

Number of materials currently in the database

Click to alphabetize the Materials Index after adding new materials

Click to update marked ingredients so you can see which ones are marked.
The Materials window

To Make a New Material Card:
Choose “New Card” from the Edit menu

enter the ingredient name

enter oxide amounts as either percent by weight (then Convert to Unity) or enter directly as unity molecular format

enter comments, suppliers, and other information

enter health hazard warnings here and check the Possible Health Hazard box to have warnings included with glaze recipes

click to calculate percentage analysis

Click to calculate molecular weight, melting point or PCE

Check box for ingreds in inventory

Click for cost calculator

Click to set material category/type

Click to search for materials which contain that oxide

Arrow buttons: go to next or previous material analysis

Arrow buttons go to all ingredients

Arrows go to ingreds in current glaze

Arrows go to ingreds in current clay

Arrows go to ingredients which are in inventory

Click to add this material to the current glaze or clay

Arrow buttons go to marked ingredients

Click chemical symbol to search for materials which contain that oxide

Insert in Recipe
Choose where to search

Choose an oxide or oxides you’d like to find in an ingredient

Enter a name or even a partial name, for example: spar to find and mark all feldspars

Find and Mark Cards is the most common choice for a first search.

Choose Find in the Found Set (Marked Cards) to refine a previous search by looking only in the currently marked cards during the search.

You can set a minimum mole amount of the oxide(s) specified

Click to start searching

Complex searches will mark cards which are found to meet the criteria you have specified.

Note: Simple searches often work best!
choose Export Blend Chart in File menu to save a text document of recipes for all blends

click a number to see the blend for this tile

click to send the recipe you’ve chosen to the Glazes recipe database

Enter the four recipes of your choice in the recipe A, B, C & D windows, make additions or changes, then use QuadBlender choices shown

click to show recipe windows for the four corner recipes A, B, C & D

click to grab current recipe visible in Glazes and enter it as blend glaze