



Overglazes

Information Guide

Metallics

OG 801 Bright Gold
OG 802 White Gold
OG 805 Premium Gold

Lusters

OG 803 Mother-of-Pearl

Overglaze Accessories

OA 901 Essence

Characteristics

Metallics

1. Opaque overglaze have the brilliance of 22-karat yellow gold or white gold.
2. Their appearance is determined by the glaze the metallic is applied over (on a gloss glaze, the metallic will be shiny; on a matte glaze, the metallic will be dull).
3. Metallic overglazes are normally applied over a fired glaze but can also be applied to high-fired porcelain bisque or stoneware.

Lusters

1. Translucent overglaze with a lustrous iridescence. Its appearance is determined by the glaze that the luster is applied over (on a gloss glaze, the metallic will be shiny; on a matte glaze, the metallic will be dull).

Work Area

When using Duncan® Overglazes, work in a clean, dust-free area with good ventilation. Your hands must be free of all oils, hand lotion and moisture.

Brushes

Choose any Duncan® brush with soft hair that will produce the coverage or strokes you wish to achieve. BR 594 No. 12 Mother-of-Pearl is perfect for applying luster. Brushes used to apply Duncan® Overglazes should be cleaned with Essence and wiped on a paper towel. Brushes must be thoroughly dry before use. Reserve brushes for exclusive use with only one Duncan® Overglaze.

Metallic Overglaze Application

1. Apply an overglaze compatible glaze to cone 04 bisque.
2. Fire to cone 06.
3. Do not stir or shake overglaze.
4. Place a small amount of overglaze on a glazed palette; apply one smooth coat.
5. Try to attain an even tint:
 - a. Premium Gold tint should be red in color.
 - b. Bright Gold tint should be brown in color.
 - c. White gold tint should be green in color.
6. Do not let metallics pool in an area; brush them out smoothly.
7. Clean brush in Essence and let dry.

Luster Overglaze Application

1. Apply an overglaze compatible glaze to cone 04 bisque.
2. Fire to cone 06.
3. Do not stir or shake overglaze.
4. Place a small amount of overglaze on a glazed palette:
 - a. For a swirled look, swirl on one coat, overlapping strokes.
 - b. For a smooth look, brush on all strokes in the same direction.
5. Correct application should produce a light blue tint.

Tips

1. If overglazes are accidentally applied on the wrong area, dip a cotton swab in Essence and wipe off misplaced color.
2. If any areas are missed, go back and touch up before the metallic or the luster overglazes dry.
3. For solid coverage with Premium Gold or Bright Gold, use either a yellow glaze or a yellow underglaze for best results; for solid coverage with White Gold, use a gray glaze or a gray underglaze.

Firing

1. Overglazes dry in about one hour but overglazed ware can be fired while still wet. The kiln must be clean, well-ventilated (do not overload) and follow a normal firing schedule.
2. Overglazed items should be stilted for firing:
 - a. Fire metallics to witness cone 019-018.
 - b. Fire lusters to witness cone 020.

Note: When using metallics and lusters on the same piece, it is best to apply the metallic first, fire to witness cone 019-018, and then apply the luster and refire to witness cone 020.

Caution

Overglazes contain solvents and should be used in a well-ventilated area. Those susceptible to odors (such as pregnant women) should be especially careful to work only in areas with an adequate ventilation system. During firing, odors are not dangerous but can be offensive. These odors quickly leave the area; however, it is not desirable to work in the kiln area during firing unless the kiln has a vented hood and an exhaust fan.

Dinnerware Safety

Overglazes can be used on surfaces that come into contact with food and drink. Care must be taken to avoid hard scrubbing when washing overglazed ware, because of the possibility of scraping off the thin layer of metal or luster. Treat your overglazed pieces as you would fine china. Although overglazed ware will take repeated washings in a dishwasher, the overglaze will eventually wear away.

Note: Ware decorated with metallic overglazes should not be used in microwave ovens.

Metallics – Premium Gold, Bright Gold and White Gold

| PROBLEMS | CAUSES | SOLUTIONS |
|---|---|---|
| Crazing | <p>If crazing has sharp lines and spider-web appearance, it is in the metallic and was caused by too hot a firing.</p> <p>If crazing is long and in just a few lines, the metallic was applied too heavily.</p> | <p>Future prevention: Make sure metallic is fired to witness cone 019-018.</p> |
| Dull, smoky or cloudy appearance | <p>Application too heavy.</p> <p>Overloading the kiln.</p> <p>Incompatible glaze.</p> | <p>Use silver polish or vinegar to polish ware.</p> <p>Allow 1" to 2" between pieces in a metallic firing.</p> <p>Fire metallic off at witness cone 06. Do not reapply metallic.</p> |
| Ware cracks in overglaze firing | <p>Defective ware has become weaker with each firing.</p> <p>Thermal shock.</p> | <p>Future prevention: Allow adequate ventilation around all ware in kiln.</p> <p>Follow proper procedures to prevent thermal shock. Be careful not to place ware too close to peephole or side of kiln.</p> |
| Fish eyes (circular separations in metallic exposing underlying glaze) | Dust or lint on wet metallic surface; grease, oil or moisture droplets on ware or in brush. | If ware has not been fired, try to touch up area. (If even coverage is not obtained, remove metallic with Essence, let dry and reapply.) |
| Purple tint | Too thin on application of the metallics. | Apply more metallic and refire. |
| Metallic sheen rubs off easily | Too cool a firing. | Apply more metallic and fire to witness cone 019. |

Mother-of-Pearl

| PROBLEMS | CAUSES | SOLUTIONS |
|--|--|---|
| Powders off | Applied too heavily. | Rub off with soft cloth, reapply 1 light coat of luster and refire to witness cone 020. |
| Turns brown in one area | Fired too close to open kiln peephole. | Refire to witness cone 020, being sure to stilt piece and place it away from peephole. |
| Frosted look | Fired too hot. | Fire off at a witness cone 06. Reapply new coat of luster. Fire no hotter than witness cone 020. |
| Purple or blue shadows or smudges | Contamination in the luster. | Fire luster to witness cone 06 to remove, then reapply and refire. (Make sure brushes are clean.) |