

# KILN ICE



# the **KILN ICE** **ADVANTAGE**

- \* Achieve the specific visual effect of traditional Guan Ware
- \* Unique patterns - The crackle effect creates delicate crackle patterns that resemble ice
- \* Dynamic Interaction - The crackle pattern interacts beautifully with any form, emphasizing curves, edges, and contours of a piece
- \* Variety of colors and aesthetic versatility

## FAQ

**Apply to...** Cone 04 Bisqueware

**Number of coats?** 3-4 heavy coats

**Fire to...** Cone 5 - Cone 6

**Food safe?** Yes, but due to durability, these glazes are not recommended for food surfaces

**What determines the size and distribution of the crackles?**

Glaze thickness can affect the size of the crackle, smaller and tighter when thin, larger, and hexagonal when thick. The clay body used will also affect the crackle.



**Category:** Mid Fire Glaze

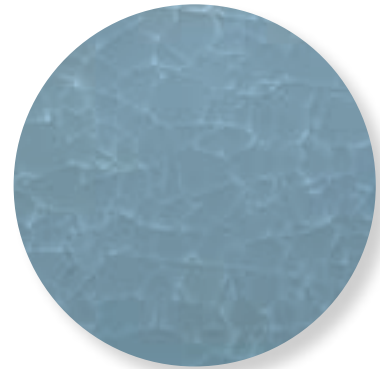
**Firing Temperature:** Cone 5- Cone 6



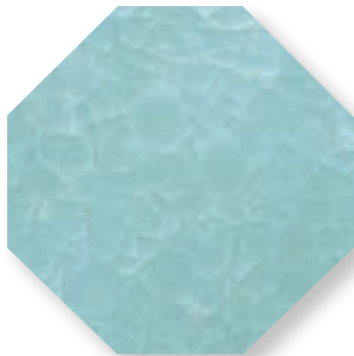
KI-11 Snow Drift



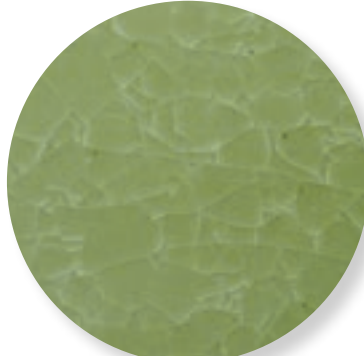
KI-18 Arctic Blush



KI-21 Winter Glass



KI-27 Glacial Lake



KI-46 Frozen Fern



KI-68 Honey Crystal



Conforms to  
ASTM D-4236



Conforms to  
ASTM D-4236



Food Safe

\*Due to durability, these glazes are not recommended for food surfaces.

\*All tiles are on AMACO Dark Chocolate No.32 clay. Fired to cone 5.

### Definition of Cone Temperatures

Cone 5 = 1184 °c (at 150°c/hour for the final 100°c of firing) / 2201°f ( at 270°f/hour in the final 200°f of firing)  
Cone 6 = 1241°c (at 150°c/hour for the final 100°c of firing) / 2266°f ( at 270°f/hour in the final 200°f of firing)

# TIPS & TRICKS

- \* Applying Kiln Ice glazes thicker than traditional AMACO glazes is critical to achieving nice crackle patterns.
- \* Multiple brushed layers is better than one thick layer.
- \* Before the ware is fired, handle with care so glaze does not flake off the edges.
- \* Incorporate a drip ring (see image below) on convex forms for the glaze to gather near the bottom of the piece. Additionally, it leaves a larger unglazed area on the piece that helps gasses escape the body and minimize pin-holing.
- \* Glaze the interior & exterior of the ware. Having some glaze on the interior and exterior of the piece is recommended but it doesn't necessarily have to be a full body wrap. Leaving some exposed clay, as stated previously, will help gasses escape the clay body to minimize pin-holing.
- \* Allow your fired piece to sit for a day or two for the full snowflake crackle effect to take place. Delayed crazing is common with this glaze; allowing the piece to cool for several days will enhance the crackle effect and add more depth to your fired piece.



Bowl: Bisque, AMACO Milk Chocolate No. 30 clay.

# APPLICATION

Achieve a greater effect with more or thicker coats of glaze.



2 Coats

4 Coats

6 Coats

\*Application tiles are KI-11 Snow Drift over AMACO Dark Chocolate No. 32 clay. Fired to cone 5.



# TESTING

The crackle effect created with Kiln Ice glazes is achieved by intentionally creating a mismatch in thermal expansion between the glaze and the clay body. Because of this, they are under high tension. To prevent dunting from uneven tension, we recommend using Kiln Ice on the inside and outside of the ware.

Do extensive tests before pairing Kiln Ice with other glazes. Glazes that are particularly stiff (e.g. matte glazes) may make for poor partners. Kiln Ice glazes pair best with more fluid glazes.

**For best results, always fire a test of any new combinations before glazing a large amount of ware.**

# BEST FORMS AND USES

The Kiln Ice glazes are best for decorative wares. Convex shapes best showcase the glaze effect.

## DECORATIVE BOWLS



KI-18 Arctic Blush over AMACO Dark Chocolate No.32 clay. Fired to cone 6.

## DECORATIVE PLATES



KI-11 Snow Drift over AMACO Dark Chocolate No.32 clay. Fired to cone 6.

## JARS



KI-27 Glacial Lake over AMACO Dark Chocolate No.32 clay. Fired to cone 6.



# CLAY



*KI-18 Arctic Bliss on AMACO A-Mix White Stoneware No.11 clay*



*KI-18 Arctic Bliss on AMACO Dark Chocolate No.32 clay*

Brown or buff clays that do not contain manganese work best with these glazes (try AMACO 30M, AMACO 32M, or AMACO 46M). Testing the clay and glaze to determine compatibility is crucial. White clays can be used, but we recommend putting a thin layer of brown AMACO Velvet Underglazes like V-314 or V-366 down first to achieve the same visual contrast as Kiln Ice on dark clays.



*Top Left: KI-11 Snow Drift over V-366 Teddy Bear Brown underglaze*

*Top Right: KI-11 Snow Drift on AMACO A-Mix White Stoneware No.11 clay*

*Bottom: KI-11 Snow Drift over V-314 Chocolate Brown underglaze*



*Artist: Michael Sprague  
KI-46 Frozen Fern on AMACO Dark Chocolate No.32 clay.*

# TAKE IT TO THE NEXT LEVEL

Follow this firing schedule to achieve enhanced glaze results and minimize pin-holing.

BISQUE FIRING SCHEDULE			
Ramp	Rate (Fahrenheit)	Temp (Fahrenheit)	Hold
1	60°F	180°F	1-3 hours (optional) to dry out ware if needed
2	200°F	600°F	-
3	240°F	1300°F	-
4	60°F	1650°F	-
5	360°F	1850°F	-
6	108°F	1945°F (cone 04)	-

GLAZE FIRING SCHEDULE			
Ramp	Rate (Fahrenheit)	Temp (Fahrenheit)	Hold
1	150°F	220°F	-
2	400°F	1980°F	-
3	100°F	2190°F	-
4	9999°F	2100°F	30 Minutes

# RESOURCES



## WANT MORE?

Visit our 5/6 glaze forum at [Facebook.com/groups/potterschoiceex](https://www.facebook.com/groups/potterschoiceex) to find inspiration, share results, and discuss with other AMACO customers!



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