

# Hard Surface & Automotive Guide



Updated January 2024. This guide covers the application of Createx Colors paints as part of a basecoat / clearcoat process onto hard-surfaces, otherwise referred to as “automotive”. This guide covers the basic application process. A test panel is recommended before all applications, especially when using a new paint or coating. Supplement this guide with the product’s Technical Data Sheet (“TDS”), available at [www.creatextech.com](http://www.creatextech.com).

## Dry Times for Adequate Curing are set for 70°F / 21°C and 50% Relative Humidity

- Extend drying times in colder temps. down to 60 deg. F°, painting under not recommended.
- Allow paint to dry in temperatures over 60 deg. F° during the initial 48 hours after application.

## PAINT MIXING & REDUCTION

For best results, add 4030 Balancing Clear or 4050 UVLS Gloss Clear to Createx paints, then thin as needed with 4011 Reducer. Allow mix 10+ minutes to acclimate before spraying.

- **% v/v = per volume.** Mix ratios are set on a per volume basis.

### 4011 Reducer

4011 is the recommended thinner for all Createx Colors paints and clears.

- 4011 mix ratios are guidelines. Add 4011 in amounts to achieve best atomization.
- 4011 lessens water surface-tension. Allow 10+ minutes of acclimation after thinning colors with 4011 before spraying for best flow and leveling.
- Generally, 4011 is added to colors ~ 20% v/v for airbrush and 10% v/v for spray-gun. For colors mixed with 4050, ~ 10% more 4011 is added: 30% v/v for airbrush and 20% v/v spray-gun.

### 4030 Balancing Clear

4030 is a urethane resin mixing clear. Add 4030 to any Createx paint to paints creates an acrylic – urethane resin blend which is much better suited for use as an “automotive” paint made for hard-surface and rigid substrates.

- Compared to 4050, 4030 creates a softer coating, which may be beneficial for airbrushing. 4030 is less viscous than 4050, so colors don’t have to be as thinned as much for airbrushing.
- 4030 is not recommended for use with candy2o. Use 4050 UVLS Gloss Clear with candy2o.

### 4050 UVLS Gloss Clear

4050 is a urethane clear that when mixed with Createx paints, creates an acrylic – urethane resin blend.

- Airbrush: Add ~ 10% v/v to Createx paints, then thin with 4011 Reducer, ~ 10% - 30% v/v.
- Spray-Gun: Add ~ 10% v/v (9:1) to standard & fluorescent colors, add ~ 20% v/v (4:1) to pearl & metallic colors. Thin with 4011 Reducer ~ 10% - 20% v/v.
- Allow mix 10+ minutes to acclimatize before spraying for best flow and leveling.
- candy2o has 4050 mix ratios different from other Createx paints. Refer to candy2o TDS for more.

### No Pot-Life

Createx paints do not have a true pot-life. Colors are generally sprayable up to 48-hours, after which sprayable viscosity may change, to which more 4011 Reducer can be added.

- Avoid adding 4011 Reducer or other thinners to colors intended for storage more than 48-hours.
- Keep capped air-tight when not pouring paint. Store in paint cabinet or a box in a dry, cool closet.

## Strain Colors Prior To Use

Mesh size 190 micron, candy2o 125 micron, 3-M™ PPS Cup 200 micron (solvent lid).

## **AIRBRUSH & SPRAY-GUN SETTINGS**

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### Spray-Gun

Compatible with any HVLP & conventional gravity-fed spray gun.

- Tip-size: 1.2mm – 1.3mm
- Mini Spray Gun: 0.8 – 1.2mm
- PSI: Follow spray-gun manufacturer's settings, often the upper psi limit of spec'd setting
- Best used with high-flow air couplings on hose fittings.

### Airbrush

All Createx paints can be sprayed through a 0.5mm tip-sized, larger volume airbrush.

- For smaller tip-sized airbrushes, use transparent colors such as Illustration Colors, Createx Transparent Airbrush Colors, Wicked Transparent, Detail and Opaque Colors also work well with small tip-sizes.
- Thin as needed to achieve a fine atomization, adding 4011 Reducer in small increments.

## **PREPERATION**

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This guide covers substrates in good condition, or otherwise ready for paint using a quality primer.

Createx paints are compatible with any primer, paint, and clear type. If applying a primer, allow it to thoroughly dry, then sand or scuff before applying paint.

### Sandpaper

320 to 800-grit may be used to prepare Createx paints.

- AutoBorne Sealer covers 320 to 400-grit.
- Createx paints cover 800-grit when airbrushing direct to substrate.
- Medium & coarse scuff pads may be used with the scratch marks will be covered by AutoBorne Sealer.
- Dry sand only. Do not wet-sand Createx paints.

### Cleaning prior to paint

- Use soapy water to remove oils, then thoroughly dry the surface with a lint-free cloth.
- Final clean before paint with a solvent-based, post-sanding (mild) degreaser or 99% isopropyl alcohol.
- Dry surface with lint-free cloth.
- Do not use a water-based cleaner as the final cleaner before painting.

## **START with AutoBorne Sealer**

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Apply AutoBorne Sealer direct to prepared primer or substrate.

- Auto-Borne Sealer is a sealer-primer and the most adhesive Createx coating.
- Apply AutoBorne Sealer direct to substrate or primer after preparation.
- 6000 Transparent Sealer is an adhesion promoter for plastic & more and is the most adhesive sealer.
- 6013 AutoBorne Silver Sealer is the metallic base for candy2o.

UVLS 4050 Gloss Clear may also be used as an adhesive ground-coat, replacing AutoBorne Sealer.

- 4050 is the best adhesion promoter for glass, and a few other substrates, please see below list.
- Only use 4050 as adhesive coating (or 4053 High Gloss), do not use UVLS 4051 Satin or 4052 Matte.

## **Adhesion to Substrates**

- Always make a test panel before painting a new substrate type to test adhesion.
- Adhesion of AutoBorne Sealer is optimized 48-hours after application. For adhesion to difficult to paint substrates such as glass or polished steel, a full 48-hour dry time may be required for adhesion.

## **Substrate – Best Createx Adhesive Coating**

- Plastic – AutoBorne 6000 Transparent Sealer
- Steel, Stainless Steel – 4050 Gloss Clear can be applied directly to metal; however a catalyzed (2k) urethane or epoxy primer is recommended for “edge-to-edge” priming as it provides best protection against corrosion in exterior conditions. 4050 is best for spot priming small, exposed areas of metal.
- Aluminum – AutoBorne Sealer
- Fiberglass – AutoBorne Sealer
- Glass – 4050 Gloss Clear
- 3D Print Composite Material, Nylon – AutoBorne Sealer
- Wood – AutoBorne Sealer
- Automotive finish – AutoBorne Sealer
- Brass – AutoBorne 6000 Transparent Sealer
- Chrome – AutoBorne 6000 Transparent Sealer
- Polished substrates not scuffed – AutoBorne 6000 Transparent Sealer
- Latex – After cleaning with isopropyl alcohol, apply Createx paints mixed with 5092 Flex Additive.
- Flexible vinyl – 4050 UVLS Gloss Clear mixed 3:1 5092 Flex Additive
- Rubber – 4050 UVLS Gloss Clear mixed 3:1 5092 Flex Additive

## **Airbrushing direct to an existing finish**

Createx paints have good adhesion when airbrushed direct to an existing finish.

- For best results, apply a medium coat of AutoBorne 6000 Transparent Sealer prior to applying color to ensure even the lightest airbrush lines adhere well to the surface.
- Prepare first by sanding 600 – 800-grit sandpaper, then cleaning with a solvent-based degreaser or 99% isopropyl alcohol using a lint-free cloth.

## **Spray-Gun Application**

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- Follow the spray gun manufacture’s recommended inlet psi settings.
- Apply paint in 50/50 overlapped pattern.
- Coats should be medium wet with fine, wetted droplets hitting surface to create coating.
- Surface distance is generally 6” – 8” from spray-gun.
- Apply first coat medium wet. A light tack-coat is not recommended to avoid texture.
- Allow each coat to dry matte before applying the next coat.
- Re-coat times are approximately 10-minutes in a spray-booth, 20-minutes in an open-environment.
- Use moving air running across the painted surface to assist drying. Do not use heat to force-dry paint as this will result in a loss of adhesion.

## **Application of Top-Coat Clear**

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For exterior and automotive paintjobs, a durable clear must be applied over Createx paints.

- Createx paints are compatible with most any clear type, both solvent-based and water-based.

- For best results, allow Createx paint to thoroughly dry for at least 1-hour prior to clear.
- No time windows. Createx paints may be top-coated with a clear any time after drying.
- Sanding Createx paints prior to applying a clear is never required for adhesion of clear.

### Automotive Top-Coat Clear

When using Createx paints as part of a primer / base-coat / clear-coat paintjob, (“automotive”), top-coating with a catalyzed (2k), solvent-based, urethane clear is recommended.

- Createx paints are universally compatible with all makes of 2k urethane clears.
- Use a slower, higher temperature reducer for best adhesion and leveling.
- Avoid fast-cure clears, reducers, and additives.
- Apply the first coat of clear medium-wet. A tack or acclimation coat is not recommended.

### Marine and Water Submersible Paintjobs, including Fishing Lures

Createx paints can be used for marine applications provided the paint is completely encapsulated by a catalyzed (2k) clear so paint is not directly exposed to water.

- A 2k epoxy clear is recommended for marine, including boats, watercraft, and fishing lures.
- Make sure to apply clear on edges, anywhere paint is exposed to ensure pin-hole free coverage.

### Drying Times and Curing

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- Dry Times for Adequate Curing are set for 70°F / 21°C and 50% Relative Humidity.
- Createx paints may dry to the touch in 10 minutes to 1-hour. Final cure is not until 48-hours.

### Minimum Recommended Drying Times

- Re-coat time: ~ 10 minutes in a spray-booth, ~ 20 minutes in an open environment.
- Time to Tape and Dry Sand: ~ 45-minutes.
- Time to Applying Clear Coat: ~ 1-hour in a spray-booth, ~ 4-hours open environment.

### No Time Windows

Createx paints may be re-coated or top-coated with a clear any time after drying. If unsure or painting in cooler or humid conditions, allow paint extended drying time will ensure best application of clear

### Assist Drying with Moving Air

Use air directed to run across the painted surface (not at it) to assist drying. Do not force dry with heat.

### Cleaning & Wiping Createx Paints

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Createx paints generally do not have to be cleaned prior to applying a clear.

- Use a post-sanding (mild) solvent-based degreaser to clean colors after they’ve thoroughly dried.
- Do not clean paint with a water-based cleaner.
- Use a lint-free tack rag made for water-based / waterborne paints.
- After painting, clean spray-gun or airbrush with warm & soapy water. Soak metallic parts in a bath of 4008 Restorer for 15 – 30 minutes to remove dried, cured paint.

### HEALTH & SAFETY

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Read cautions and warnings on labels & Safety Data Sheets, available at [www.createstech.com](http://www.createstech.com).

Always spray in a well-ventilated area. Always wear a NIOSH / MSHA approved respirator when painting.