

Hard Surface & Automotive Guide



Updated July 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.

NEW for this Guide: 4021 Reducer. 4021 Reducer is now recommended as the primary thinner and is the same as 4011 Reducer in regard to usage (same mix ratios), storage (paint mix with either 4011 or 4021 may be kept indefinitely when capped airtight), and price (4011 and 4021 Reducer are the same price).

4021 Reducer improves flow with less tip-dry while spraying and promotes leveling while the paint is drying better compared to thinning paint with 4011 Reducer.

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 ~ 10 % per volume to Createx paints, then thin as needed with 4021 Reducer (or 4011 Reducer).

- **Generally, Createx paints are thinned ~ 10% - 25% per volume for airbrush, and ~ 10% per volume for application with a spray-gun** using a 1.2mm – 1.3mm tip-size sprayed at the spray gun’s inlet psi recommendation.
- Allow reduced paint mixture 10-minutes or more acclimation time which lessens surface tension resulting in improved leveling and flow while spraying.
- candy2o – refer to candy2o TDS for mix ratios. Airbrush 4050 1:1 candy2o, spray gun 4050 6:1 candy2o.
- % v/v = per volume. Mix ratios are set on a per volume basis.

4021 Reducer

- New Createx Reducer introduced in July 2024. Can be used same as 4011 Reducer (mix ratios, etc.).
- 4021 Reducer has a slower evaporation rate compared to 4011 Reducer, which improves the paint’s blending and leveling, for a more consistent color coat without texture.
- Over-reducing Createx paints with 4021 Reducer helps blend colors for smooth transitions and detailed airbrush lines without a stippled pattern, much more compared to thinning with 4011 Reducer or water. This is similar to over-reducing a solvent-based urethane resin paint for airbrushing fine-lines with.
- 4021 Reducer does not create a “pot-life” when mixed with Createx paints and, when capped airtight, paints mixed with 4021 Reducer can be stored indefinitely, same as when thinning with 4011 Reducer.
- Refer to 4021Reducer tech data sheet for more, available at www.creatextech.com.

4011 Reducer

4011 a thinner compatible for use with all Createx Colors paints and clears.

- 4011 mix ratios are guidelines. Add 4011 in amounts to achieve best atomization.
- 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 candy2o. Use 4050 UVLS Gloss Clear as the mixing 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 mix ratios with 4050 different from other Createx paints.
 - Generally, airbrush 4050 1:1 candy2o, and spray gun 4050 6:1 candy2o).
 - Refer to the candy2o tech sheet for more about mixing candy2o, available www.creatextech.com.

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 4021 Reducer or 4011 Reducer can be added.

- Avoid adding 4021 Reducer, 4011 Reducer or other thinners to colors intended for use more than 48-hours after mixing. Yes, mix will last longer when kept airtight, but best practice is not to store reduced paint.
- 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

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 4021 or 4011 Reducer in small increments.

PREPERATION

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

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

- 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

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

- 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

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

Read cautions and warnings on labels & Safety Data Sheets, available at www.creatextech.com.

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