Application Guide

Auto Air Colors™ is a durable paint intended for use as base coat and graphic paint for automotive finishes and other exterior applications. Auto Air Colors™ are meant to be top coated with a durable, urethane clear. Auto Air Colors™ are compatible with all urethane, waterborne and water-based paint systems. For use with lacquer and enamel paint systems, test first.

Conditions	**Recommended painting conditions: 70º F or higher in a dry, dust-free environment.** When painting in humid or colder conditions, allow for extended drying time. Use of air decreases drying time and is recommended as the primary means to cure paint. Heat may also assist curing. Air source should be free of contaminates, especially oil and water.
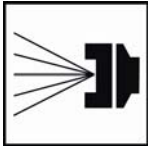
Set-Up	**Spray Gun Tip Size:** 1.2mm: 35-40+ PSI. Pressure settings may vary. Adjust for optimum atomization.
	Reducing: Auto Air Colors 9:1 4011 Flash Reducer
	Touch-Up Gun: 0.8mm to 1.0mm tip size.
	Follow gun manufacturer's recommendation for distances to surface.
	Airbrush Tip Size: 0.5mm: @ 40-50+ PSI
	0.3mm and smaller: 4200 Series Transparent Colors or 4700 Series Auto-Borne Colors reduced 3:1 4011 Flash Reducer.
	Reducing: Always use 4011 Flash Reducer with all Auto Air Colors for all applications.

Materials	A 4 oz. bottle of Auto Air Color will generally cover 3 square feet. Refer to specific Series Product guide for additional coverage information.

Motorcycles: 1 quart and 1 pint   Small vehicle: 2 quarts
Medium to large vehicle: 2 1/2—3 quarts   Full size truck or SUV: 1 gallon

Preparation	Proper preparation is crucial to ensuring a successful paint job. Prepare surface using normal custom painting methods with attention to the following:

Clean surface thoroughly, before and after sanding. Use a solvent-based, post-sanding cleaner.

Scuff: Over primed surfaced, use 600 grit wet & dry paper/scuff pad or coarser.

1. When applying graphics over urethane finish which serves as base color for Auto Air Colors, scuff with 800 grit wet & dry paper to avoid large scratches.

2. Sanding and/or scuffing needs to completely remove any gloss points from the surface. Close attention needs to be made with crevices, edges, folds and other areas that are difficult to sand with broad strokes.

Strain Colors: Use a nylon meshed-filter to strain colors prior to each usage.
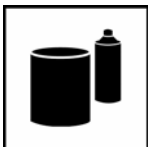
Primers	Auto Air Colors™ are compatible with all urethane, waterborne and epoxy automotive primers. Use of a urethane, epoxy or other-type sealer is not required. Instead, use Auto Air 4000 Series Sealer.

Metal – Use a self-etching, DTM primer, epoxy or urethane sealer prior to applying Auto Air Sealer. Scuff primer or sealer with 600-grit sandpaper prior to applying Auto Air Sealer.

Plastics – Use of an adhesion promoter necessary when working over plastics which have an oily composition. Scuff thoroughly removing all gloss. An adhesion/tape test is the best method to determine whether an adhesion promoter is necessary.

Aluminum – Apply 4000 Series Sealer direct to substrate after scuffing.

Urethane, Enamel and Lacquer Finishes – Auto Air Colors™ may be used direct to existing any cured finish, urethane, lacquer, enamel and others. Apply 4000 Series Sealer direct to substrate after scuffing. If using finish as base color for graphics with Auto Air Colors, use direct to finish after scuffing with 800 grit wet & dry paper without use of 4000 Series Sealers.

Fiberglass - Apply 4000 Series Sealer direct to substrate after scuffing.

**Carbon-fiber** - Apply 4000 Series Sealer direct to substrate after scuffing.

Application and Dry Times	**3 Coats –** The majority of the colors achieve coverage in 3 coats. Refer to color's specific Product Guide for further coverage information.

Apply the first coat lightly. – Apply the first coat of Auto Air Colors™ as a light coat, similar to a guide coat. The second and third coat may be applied with more material create an even finish. Avoid wet coats with excess material build-up. Applying a wet coat over a wet coat which has not dried significantly increases drying times and may result in peeling during taping.

- Reduce all colors and sealers with 4011 Flash Reducer. In addition to improving flow, reducing tip-dry and creating a smooth finish upon curing, 4011 Flash Reducer significantly decreases drying times.

- Best to allow each coat to dry tack-free prior to applying next coat. Trapping a wet coat under another wet coat greatly increases drying times.

- Initial coats have a speckled appearance. Additional coats fill in coverage producing even finish. Final coat should fill in field of color and create an even finish.

- Working in light coats is important to ensuring successful results. A light coat of a water-based paint is much thinner than a light coat of urethane paint. Do not try to get total coverage from one coat. Avoid overly wetted coats. Overly wetted coats may cause pigment to migrate causing a "fish-eye" effect. The last coat should be applied with more material to create an even finish.

- There are no time windows when working with Auto Air Colors™. Additional coats may be applied at any time once the underlying coat has dried. Additional coats may be done within minutes of the last coat or several days may pass before the next coat is applied without the need to sand or scuff.
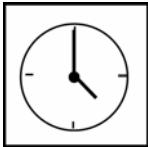
Recoat Time:
Booth conditions- Generally 2-5 minutes.

Open conditions- Generally 5 minutes to 1 hour. Temperature, Humidity and other environmental conditions greatly affect drying times when painting without a booth. Use of 4011 Flash Reducer and using a 1.2mm tip-sized gun at 40 PSI to correctly atomize the paint will also keep drying times to a minimum. Use of air and heat may be used to decrease drying times. Auto Air does not require heat to cure; only air curing will produce as strong a finish as curing with heat. When using heat from a handheld device, allow paint to air cure for a few minutes prior to using heat to prevent affecting the paint's film or adhesion. Aggressive use of heat may result in skinning over paint, creating a latex-like film which easily peels from substrate.

Mid-Coats: Optional use of 4004 Transparent Base as mid-coat prior to taping protects colors from markings during taping, especially when taping over 4100 Series color.

- Apply 1 – 2 coats after curing underlying paint job.

- Humid conditions: use of a urethane mid-coat works best when protecting colors prior to taping.

- Use 4004 Transparent Base as a protective mid-coat prior to taping over 4600 Series Candy Colors.

Spot Repair	Before attempting spot repair, make sure paint is thoroughly cured. 4200 Series Transparent, 4500 Series Sparklescent and 4600 Series Candy Colors do not sand cleanly for spot repairing.

1.) Sand paint off failed area. Use coarse dry paper. Do not wet sand.

2.) Sand paint past failed area insuring all paint is removed and no edge remains.

3.) Begin repairing by painting sanded area first. Apply enough coats to completely cover.

4.) After filling in sanded area, blend by painting entire panel or extended area surrounding repair.

Curing	Auto Air Colors can be cured in a spray booth with air movement, by infrared heat lamps, a heat gun or simply allowing colors to air dry completely. Use of 4011 Flash Reducer ensures colors flash and cure thoroughly.

Curing in Spray Booth- A spray booth is the preferred environment for painting vehicles with the Auto Air Colors. Bake paint at 120-150ºF for 15-20 minutes or until colors are completely dried.
For quicker drying times, increase airflow rate and booth temperature. Colors may be cured in excess of 300ºF.

Curing in Open Conditions- Recommended minimum temperature 70ºF and low humidity. Painting in cooler or humid conditions requires extended re-coat times. Allow coats to dry tack-free prior to applying next coat. Air flow and use of heat to assist air curing helps decrease curing times.

- Auto Air Colors™ are cured with heat and/or airflow. Use heat gun or infra-red lamp to cure colors. If not curing with heat, allow colors ample time to dry prior to taping or clear coat application. Drying time will vary depending upon environment.

Curing

- In Infra-red lamp (IR) – allow lamp to cure colors at a safe distance generally over 12 inches to prevent blistering paint. Cure colors dry to the touch without tack.

- Heat guns are effective when painting smaller areas. Allow paint to air cure for 1-2 min. prior to applying heat to avoid skinning paint which causes a loss of adhesion. Gently apply heat. Avoid aggressive use of heat as paint may blister or otherwise not cure to a strong film. Heat is not essential for curing. Auto Air will cure into a strong film with sufficient air curing without use of heat.

Taping

When used correctly, Auto Air Colors™ will not peel when taped. Most types of tape work excellent. When using transfer or masking tapes, use a medium to high tack tape such as 4870 Auto Air Masking Tape. When using fine line tape, paper tape such as 4872 V-Tape 1/16" adheres better than plastic tape.

Tape Time:
Tape times vary per color, spray conditions and amount of material applied. Working in light coats, allowing each coat to dry tack-free prior to applying next coat decreases tape times significantly. Allow paint to completely dry tack-free prior to taping. Times vary from 20 minutes to 2 hours depending upon conditions.

Helpful Tips for Masking and Taping.
1.) **Avoid Excessive Heat-**
   Avoid over-using heat, especially from hand-held heat guns. Excessive heat during the curing process can hurt adhesion turning the paint into a latex film which lifts easily when taped. Allowing the paint to air cure creates a strong film which may be aggressively taped. If using heat, do so sparingly, allowing paint to air cure initially until tack-free. Allow paint to cool to room temperature prior to taping.
2.) **Recoat With Base Colors-**
   To create a cleaner, crisper edge along the tapeline, apply another coat of base color prior to applying graphics color. Additional coat of base color fills in open spaces under tape, creating a crisper line when the graphic color is applied.
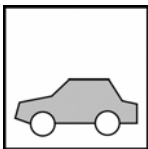
Cleaning

Cleaning Auto Air prior to clearing is not absolutely necessary as trace oils do not effect adhesion with clear as with solvent-based paints. If contaminants are visible, clean with either a post-sanding degreaser or mineral spirits. Do not use water to clean.

Clearing

A) Start with 1 light tack coat. Allow ample flash time to ensure acclimation with paint.
B) Apply wet coats. Follow clear manufacturer's instructions.
C) Use a medium or high temperature catalyst. Avoid using low temperature (fast curing) as rapid curing will not allow optimum adhesion with Auto Air Colors. Slower cure times allow better acclimation with the underlying paint.

Auto Air Colors are compatible with all urethane clears. Compatibility with other clear types varies. Test first.

Use a slower activator/ hardener to allow for more reflow & self-leveling, allowing clear time to acclimate with paint. Avoid use of hyper-cure hardeners.

Do not over-reduce when using a 3-part clear. Over-reducing may cause die-back or peeling as excess solvent will not release quickly once acclimated into Auto Air Colors.

There are no time window limitations to follow when applying the clear. Clear may be applied at any time after colors cure without scuffing.

When clearing over large flaked colors such as 4400 Series Gem Color-Shift™ Colors and 4500 Series Colors, use of a high-solids clear is recommended to bury the pearl-flakes.

Equipment Clean Up

Use Auto Air Cleaner or Restorer as directed on label for best removal and maintenance of spray equipment when using Auto Air Colors.

Safety

Although Auto Air Colors™ contain 0.1 VOC, the user or any persons who may be exposed to the airborne particulates are required to wear a NIOSH/MSHA approved respirator. Protect from contact with skin or eyes. Use standard safety and handling procedures to minimize potentials hazards. See Material Safety Data Sheets for complete safety and handling information.

Series Overview

More product information available in catalog and at www.autoaircolors.com.

4000 Series Reducers, Sealers & Cleaners

Sealer Dark and White – Use as initial layer of Auto Air Colors™ over prepared surface. Suitable for use as a replacement of urethane or epoxy sealer except over bare, untreated metal. May be applied direct to urethane, enamel, lacquer and other finishes after scuffing with 800 grit wet/dry paper or coarser grade of abrasive. Scuffing Base Coat prior to application of color is not required.

Use of Sealer may be omitted when using existing finish for a color-keyed base (example, 4500 Series Hot Rod Sparkle Color over a black urethane finish) or when using a similar 4200 Series Semi-Opaque Colors such as 4220 Deep Black.

Tinting 4001 Sealer with top-coat color improves coverage of top-coat color. This is especially beneficial when working with red, yellow and orange colors and transparent colors such as the 4500 Series Sparklescent™ Mango and Tequila Yellow. Tinting Base Coat Sealer White with 4205 Semi-Opaque Flame Orange will create a pastel-like orange base color which the Sparklescent™ Mango will cover quicker with less material required for the Mango's finish.

Transparent Base – Use as base for mixing with 4600 Series Candy Colors and as mid-coat.

4011 Flash Reducer – Essential reducer use anytime paint is applied. Improves performance of all Auto Air Colors. Contains solvents which improve flow, reduce tip-dry and assist curing to a level, smooth film. Most often used 10% per volume with spray guns, more with airbrush. Reduce 4600 Series Candy-Pigments 3:1 4011 Flash Reducer. 4010 Flash Reducer is a specialty reducer with less solvent for less flow and leveling enhancement.

Cleaner- Highly concentrated biodegradable cleaner used to clean airbrushes or spray guns.

Restorer- Removes Auto Air Colors™ or dissolves cured and uncured water-based paints. Makes for easy clean-up and complete removal of Auto Air Colors for cured finishes (prior to clear) and dried paint in spray guns and airbrushes.

4100 Series Aluminum Bases

Highly reflective bases for 4600 Series Candy-Pigment colors. Do not use Aluminum Bases direct to substrate.
Always apply Aluminum Bases over 4002 Sealer Dark or other Auto Air coat for optimum adhesion.

4200 Series Graphic Colors

Semi-Opaque Colors – Standard base coat colors.
Fluorescent Colors – Limited lightfast when exposed to sunlight, use with discretion.
Transparent Colors – Use for fine-detailed airbrushing, blending and as a toner by mixing with other series colors.

4300 Series Special FX™ Colors

Pearlized, Metallic and Iridescent Colors - Colors are opaque and cover well. May be used as a base for 4600 Series Candy Colors

4400 Series Color-Shift FX™

Gem Color-Shift™ – Holographic, color-shifting pearl flakes in a transparent base. Use over black or other color base for color-keying effects. Best if 4004 Transparent Base applied as mid-coat over Gem's large pigment size for a more-even paint film prior to clearing.

Flair Color-Shift™ – Multiple color shifting colors.

Hi Lite Interference - Subtle color changing pearl in a transparent base. Use over black or other colors for color-keying effects. Travels from respective color to transparent. Great for ghostlike effects.

4500 Series Sparkle™ Colors

Hot Rod Sparkle™ – Large pearl flakes in a transparent base. Use over black or other colors for color-keying effects. Mix direct with 4200 Series Transparent Colors for candied-pearl bases. Mix direct with 4600 Series Candy Colors for pearlescent candy colors (replaces by volume the 4004 Transparent Base needed in candy mix ratio). Best if 4004 Transparent Base applied as mid-coat over Hot Rod Sparkle's™ large pigment size for a more-even paint film prior to clearing.

Sparkle Flake™ – A metal flake in a transparent base. Use over black or other colors for color-keying effects. Mix direct with 4600 Series Candy Colors for pearlescent candy colors (replaces by volume the 4004 Transparent Base needed in candy mix ratio). Best if 4004 Trans. Base applied as mid-coat over flake's large pigment size for a more-even paint film prior to clearing.

Cosmic Sparkle™ - Small pearl flakes in a transparent base. Similar to Hot Rod Sparkle™.

Sparklescent™ - Unique blends of multiple effects colors that create a single stage "candied" custom finish color. Apply over white base or color key with a 4300 Series Metallic Colors base. For extra effects, use Sparklescent™ Colors as base for 4400 Series Gem Color-Shift Colors and 4500 Series Hot Rod Sparkle™ and Cosmic Sparkle™ Colors.

4600 Series Candy - Pigment Colors

Pigment-based candy colors. Concentrated - reduce 3:1 4011 Flash Reducer when using as mid-coat over aluminum or metallic base. Colors cure to a matte finish; candied effect visible after clear applied.

4700 Series Auto-Borne Colors

Colors which contain more solvents than do other Auto Air Series for urethane-like performance. Excellent for detailed, fine-line control with an airbrush as well as base colors which dry quickly and very smooth. Reduce in any ratio with 4011 Flash Reducer depending upon airbrush tip-size and application.