

## HIGH FLOW ACRYLICS

*A free-flowing acrylic paint line for use with drawing tools, airbrush and spraying, and pen & ink applications. The thin consistency allows for both highly detailed applications and large area gestural painting.*

## PRODUCT DESCRIPTION

### GOLDEN High Flow Acrylics are:

- A set of 49 colors, including Fluorescent and Iridescent Colors made with the same ingredients of other GOLDEN Artist Colors paint lines.
- Formulated with 100% acrylic polymer dispersion, resulting in a durable paint layer with excellent water and chemical resistance.
- Made with finely ground pigments to reduce clogging issues in small tips and nozzles.
- Additives such as flow improvers, film levelers and retarders create a very thin and free-flowing paint.
- Application use ranges from fine line-work to large passages on a variety of surfaces, such as paper, canvas, panel and other artist supports.

## PRE-USE MIXING INSTRUCTIONS

- **Remove the safety seal**
  1. Unscrew the cap
  2. Carefully peel off and discard the seal
  3. Securely re-attach the twist-top cap
- **Assure the paint is well-mixed prior to use**

*NOTE: High Flow Acrylics are likely to have a degree of separation and soft settling when they are not being used. Before using, follow this procedure to assure a homogenous paint*

  1. Assure the twist top cap is closed and secure prior to shaking the container
  2. If necessary, free up the mixing ball inside the container by carefully tapping the bottom edge against a hard surface
  3. Shake the container for 30 seconds or until the product is evenly mixed
  4. Some colors may require a longer mixing time than others due to pigment density
  5. Re-shake the bottle after long periods of time or whenever there are signs of settling

## APPLICATION

**GOLDEN High Flow Acrylics (HFAs)** are professional artist grade acrylic paints. HFAs may be used whenever a thin paint is required. This Product Information Sheet provides some general suggestions and starting points for specific applications, but each artist will develop their own methods and processes as needed

- **General Thinning Instructions:** Thinning is readily accomplished by simply adding water. Adding over 20% water begins to change other properties. Using a blend of Airbrush Transparent Extender and water can thin the paint and maintain the paint's integrity. Adding only Airbrush Transparent Extender increases transparency and lowering the pigment amount but does not thin the High Flow Acrylics.
- **Blends with other GOLDEN Products:**

*NOTE: HFAs contain retarders which alter the drying times of a mixture; thicker paint layers may remain tacky for long periods of time.*

GOLDEN HFAs are compatible with most GOLDEN Artist Colors' paints and mediums. They can be added to **GOLDEN Heavy Body Acrylics** or **GOLDEN Fluid Acrylics** to thin the paint without a loss of pigment or film strength. Extend HFAs with **GOLDEN Airbrush Transparent**

**Extender** as needed. Adding high levels of water are acceptable when doing color stains on absorbent surfaces but additional layers of acrylic medium applied afterward may be required for long term durability.

- **Use as colorant/tint:** As with any GOLDEN paint, HFAs may be used to add color to gels, mediums and pastes. They blend readily with thinner mediums, such as GOLDEN Acrylic Glazing Liquid, or GOLDEN Polymer Medium (Gloss).

**Paint Sensitivity Timelines:** The HFAs may require additional time to dry before applying other paints or mediums over them, especially if those materials contain retarders. Allow for HFAs to dry sufficiently to avoid sensitivity issues. In most applications the waiting period is several minutes.

**Isolation Coats and Varnishing:** Allow 12-24 hours for the HFA layers to dry before applying isolation coats or varnish layers. Some colors, such as the Fluorescent Colors, can take longer to fully cure than others. Test the process to identify the amount of time to wait for drying or which mediums can be more problematic than others.

## SUBSTRATES

HFAs absorb readily and spread freely. They are influenced by gravity, much like working with watercolors. In some cases, switching or modifying the surface before painting can greatly alter how the paints behave.

- **Absorbent Substrates:** When working on absorbent surfaces like watercolor paper, thin layers of HFAs lose their paint sensitivity very quickly and may be painted over within several minutes without concern of lifting.
- **Non-Porous Substrates:** When working on non-absorbent surfaces such as acrylic sheeting (PlexiGlass®, Acrylite®, etc.), Mylar®, and Duralar®, the HFAs may be applied without a primer. It is important to remove contaminants like fingerprint oils and release agents, and test each substrate prior to use. Because HFAs and other paints take longer to dry on non-porous substrates, some thin mediums and paint layers may crawl and not lay evenly on recently applied paint layers.

## GENERAL PAINTING SUGGESTIONS

**Brushes:** Both natural and synthetic brushes may be used with HFAs. Fine detail brushes work exceptionally well with these paints and can produce long consistent lines. Color wash brushes intended for watermedia applications or watercolor techniques are suitable as well. Coarse bristle brushes generate more foam bubbles due to their rougher feel especially on textural surfaces.

- **Glazing:** When it is important to maintain the consistency of HFAs use GOLDEN Airbrush Transparent Extender. Other GOLDEN Mediums may be used to extend the HFAs but they will change the consistency of the paint.
- **Water Media Techniques:** HFAs produce intense color washes due to their high pigment load. They can be modified as needed with water when working on paper and other absorbent surfaces. Over thinning with water can create sensitive paint layers, especially when used on non-absorbent surfaces.
- **Canvas Stains:** Large areas of color can be created without any need for additional thinning with water or additives. Adding high levels of water increases the surface tension, reducing the ability of the color to absorb into the raw canvas. Add GOLDEN Acrylic Flow Release (as directed) to improve the staining ability.
- **Pours:** HFAs are well suited for use on large areas, where the thin consistency allows for free flowing color layers. The pigment size and intensity varies between each color. Denser, larger pigment particles settle more rapidly than smaller particles.

- **Wet into Wet:** The thin feel and slow drying nature allows HFAs to readily spread across wet surfaces or paint layers. Different kinds of acrylic gels and mediums can alter the behavior, as well as different paint colors will produce different patterns and spread rates.

## AIRBRUSH & SPRAYING

HFAs spray very well through airbrushes with minimal clogging. Some pigments are not well suited for use in airbrushes with small nozzles and fine tips, so refer to the reference chart. Due to pigment particle differences, some colors will spray better than others (see table below.) If thinning is required, add small amounts of water into the paint. When a high degree of extending is required, use the GOLDEN Airbrush Transparent Extender.

Preval sprayers, pump sprayers or other spray equipment not designed for good atomization are likely to produce uneven, slower drying results. ***Mouth Atomizers are NOT recommended.***

- **Spray Equipment:** The thin viscosity allows for spraying straight out of the container without the need for mediums or modifiers. Smaller airbrushes can be sprayed at 25-50 p.s.i. Larger spray equipment should be sprayed in the lower end of the equipment's recommendations to reduce overspray. HVLP Systems may be used with this paint line, although the nozzle sizes should be smaller, such as 1.4mm to avoid over atomization of spray which can result in a rougher, chalky paint surface.
- **Masking & Frisket Use:** HFAs have excellent resistance to pull-up when removing frisket or tape. When masking, allow underlying paint layers to dry at least 5 minutes or longer depending on paint thickness and drying conditions. Force-drying when masking should be done very cautiously as it can cause the masking films to bubble, warp, or the adhesives to increase their grab to the paint surface. Use hair driers with low air speed and cool temperature settings.

Some low-tack masking films will not adhere sufficiently to the surface of the HFAs. Due to the variety of brands and versions, it is important to test the performance of each frisket and tape to reduce the chance of improper adhesion. Low tack films are prone to lifting during spraying, and high tack films and tapes may pull paint up during removal or repositioning.

- **HFAs Replace the Discontinued GOLDEN Airbrush Colors:** The GOLDEN Airbrush Color Paint line was discontinued in 2013. The HFAs offer a larger range of color choice, but there are some differences between the two paint lines regarding spraying.
  - 49 colors offered in HFA.
  - No Opaque naming convention in the HFAs. There will be Transparent colors but in HFA's the full strength colors of the same name will have the same coverage as their Airbrush Color counterpart.
  - Harder, more durable paint film. HFA's are less sensitive after dry than Airbrush Colors.
  - Slightly thicker paint formula. Add small amounts of water to thin as needed.

The HFAs are a larger range of color choices compared to the GOLDEN Airbrush Colors paints, but some previous colors are not carried over into the new paint line.

**Below is a recipe guide to recreate the lost Airbrush Colors**

Airbrush Color Name	Paint Color #1	Paint Color #2	Paint Color #3
<b>Dioxazine Purple*</b>	10 drops Anthraquinone Blue	2 drops Quinacridone Magenta	
<b>Ultramarine Blue Hue</b>	10 drops Anthraquinone Blue	3 drops Quinacridone Magenta	1 drop Titanium White
<b>Bright Orange</b>	10 drops Hansa Yellow Medium	1 drop Naphthol Red Light	
<b>Bright Red Orange</b>	6 drops Hansa Yellow Medium	4 drops Naphthol Red Light	

Airbrush Color Name	Paint Color #1	Paint Color #2	Paint Color #3
Bright Yellow Green	9 drops Hansa Yellow Light	1 drop Transparent Phthalo Green BS	
Permanent Green Light	6 drops Hansa Yellow Light	4 drops Phthalo Green BS	
Permanent Green Dark	8 drops Hansa Yellow Light	2 drops Phthalo Blue GS	
Hooker's Green Hue	6 drops Phthalo Green BS	3 drops Hansa Yellow Light	1 drop Carbon Black
Raw Sienna Hue	9 drops Hansa Yellow Light	1 drop Naphthol Red Light	1 drop Transparent Shading Gray**
Burnt Sienna Hue	12 drops Diarylide Yellow	6 drops Naphthol Red Light	1 drop Transparent Shading Gray**
Raw Umber Hue	6 drops Hansa Yellow Medium	3 drops Naphthol Red Light	1 drop Carbon Black
Transparent Raw Umber Hue	1 drop Transparent Phthalo Green BS	1 drop Transparent Shading Gray**	1 drop Transparent Shading Gray**

\*Dioxazine Purple is a single pigment color, but not available in HFAs.

\*\* Transparent Shading Gray is a lower pigmented version of Carbon Black, making it easier to add in small quantities. In larger mixes, Carbon Black may be used.

## PEN & INK APPLICATIONS

The low viscosity of HFAs allow for use in a large variety of pens. However, because of the range of pigments used in this paint line, some paint colors may perform better than others in different style nibs and tips.

- **Pen Size Selection for Cartridge Pens:** Although colors will behave differently depending on their colorant size and shape, very fine line nozzles (.35mm or smaller) are highly prone to clogging and should be avoided. **Fluorescent and Iridescent particles are especially likely to clog fountain and technical pens. It is not recommended to leave HFA's in pens after use.**
- **Thinning HFAs for use in Calligraphy and Dip Pens:** Many High Flow Acrylics work well in dip pens straight from the bottle but if a color needs thinning, start by simply adding small amounts of water. If adding water doesn't satisfactorily improve the flow, premix a blend of water and GOLDEN Airbrush Medium (3 parts water to 2 parts Airbrush Medium) and add into the paint as needed.
- **IMPORTANT: ALWAYS FOLLOW TOOL MANUFACTURER'S INSTRUCTIONS FOR PROPER CARE AND CLEANING OF PENS AND NIBS. Using HFAs or any paint/ink not recommended may void a manufacturer's warranty.**

## TOOL SELECTION QUICK REFERENCE CHART

**NOTE: All High Flow Acrylics NOT listed below worked well for both airbrush and technical pens of all sizes.**

PAINT COLOR	AIRBRUSHES		
	Fine Tip (.15-.2mm)	Medium Tip (.2-.3mm)	Large Tip (.3mm+)
Fluorescents (All)		X	X
Iridescents (All)		X	X
Burnt Sienna	X	X	X

	AIRBRUSHES	
Green Gold	X	X
Nickel Azo Yellow	X	X
Quin./Nickel Azo Gold	X	X
Raw Sienna	X	X
Raw Umber	X	X
Ultramarine Blue	X	X

## ADDITIONAL USES

- **Automotive:** HFAs can be used for custom automotive painting with proper surface preparation and top-coating. The underlying paint layers and topcoat should be intended for automotive applications. The surface should be clean of finger oils and dust, and scuffed sufficiently to allow for proper adhesion. The acrylic paint layers do not need additional sanding in order for the topcoat to adhere. However, allow enough time for the water, retarders and other additives to leave the film prior to clear-coating.
- **Exterior Signage/Murals:** Any paint color listed in the GOLDEN Application sheet [Painting Exterior Murals](#) may be used for outdoor applications. Guidelines for preparation and varnishing are similar to when using other GOLDEN paint lines.
- **Wood Staining:** The HFAs are suitable for staining wood used for fine art and decorative applications. The pigments offer a wide range of color stain possibilities as well as more opaque layers. Review the GOLDEN Application sheet [Woodstaining Objects with GOLDEN Acrylics](#) for more information on this application.
- **Fabric/Textile:** When blended with GOLDEN GAC 900 or GOLDEN Silkscreen Fabric Gel (heat-settable mediums designed to improve launderability and softness of hand. Start with 1:1 ratios of paint to GAC 900/Silkscreen Fabric Gel, and adjust as needed. Follow the GOLDEN Application Sheet [GOLDEN Acrylics on Fabrics](#) for further guidance.

## STORAGE and CLEANUP INSTRUCTIONS

- Always close the caps when the paint is not in use. Store acrylic paints in an area where excessive heat and freezing temperatures are minimized.
- Clean tools with soapy water immediately after use and avoid allowing paint to dry in brushes or other tools. Dried paint films on tools may require the use of paint cleaners designed for use with acrylics.
- Some pen and airbrush manufactures specify specific cleaners and methods for proper care of their tools. **ALWAYS FOLLOW TOOL MANUFACTURER'S INSTRUCTIONS FOR PROPER CARE AND CLEANING OF PENS AND NIBS.** The use of any paint other than the recommended inks may void a manufacturer's warranty.

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