



Dear HI-FLOAT User,

It is with great excitement that we present the latest edition of *The HI-FLOAT Book*. It has been fifteen years since its first publication, and we continue to learn more about increasing the floating life of latex balloons.

In 1982 Marjorie opened a small balloon delivery shop in Louisville, Kentucky. She quickly noticed a large number of complaints from customers who were unhappy because their balloons floated less than a day. She asked me if I could do something to make the balloons float longer. I am her husband and was employed at the time in the Research and Development department of a large chemical company.

I went to work on the problem at night in my basement shop, and after about a year developed HI-FLOAT. The rest is history; HI-FLOAT has become a phenomenal success. In 1992 we introduced an improved formula, SUPER HI-FLOAT, which worked twice as well. In 2002 the next generation of balloon treatment was born — ULTRA HI-FLOAT. This concentrated formula works twice as well as SUPER, and can increase the floating life of a latex balloon up to twenty-five times.

This booklet contains tips for using HI-FLOAT, SUPER HI-FLOAT, and ULTRA HI-FLOAT, and answers the most frequently asked questions. In addition, for the more advanced user we have included several fun balloon designs and special effects. You will learn how to make confetti balloons, how to turn a white balloon into a colorful marbled balloon using food coloring, how to make spider webs inside clear balloons for Halloween, and more.

HI-FLOAT can also be used to coat the outside of balloons to keep them from oxidizing. Instructions are given for two different outside coating techniques.

We sincerely hope you find this booklet helpful. If after reading the booklet you still have any questions or problems, please phone us at (502) 244-0984 or toll-free in the U.S. at (800) 57-FLOAT. You can also email info@hi-float.com, visit our web site www.hi-float.com, or write the HI-FLOAT Co. at 13025 Middletown Industrial Blvd.; Louisville, KY 40223 for more information. We will do everything we can to help you.

We wish you every possible success!

Cordially,

Don and Marjorie
Burchette

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GENERAL INFORMATION

What is HI-FLOAT?

HI-FLOAT is an aqueous solution containing a special water soluble plastic. It dries inside the latex balloon to form a barrier coating which helps hold in helium. This coating greatly increases the floating life of the balloon.

When to use HI-FLOAT, SUPER HI-FLOAT, or ULTRA HI-FLOAT?

A simple rule of thumb is that you may use either SUPER HI-FLOAT or ULTRA HI-FLOAT if the coating is on the **inside** of the balloon. ULTRA HI-FLOAT is a new and improved formula that will give double the floating life of SUPER HI-FLOAT under any conditions. It is concentrated so the balloons float better initially and there is less mess. It also works better in hot or humid conditions. We recommend you always use ULTRA to get the maximum floating life possible.

If you are coating the **outside** of the balloon to prevent oxidation or to glue things to the balloon such as confetti, use regular HI-FLOAT.

Is HI-FLOAT safe?

Yes. HI-FLOAT is non-toxic, non-irritating, non-corrosive, non-flammable, and biodegradable. It is very similar to the adhesive found on the back of postage stamps. Wash off the skin with water. If accidentally splashed into the eyes, flush with water for several minutes.

Although it is non-toxic, it is a good idea to keep bottles away from small children.

Floating life increase

When used properly, SUPER HI-FLOAT increases the floating life of latex balloons on average by about ten times and ULTRA HI-FLOAT increases floating life on average about twenty-five times. The following table shows typical floating times for various sizes of balloons.

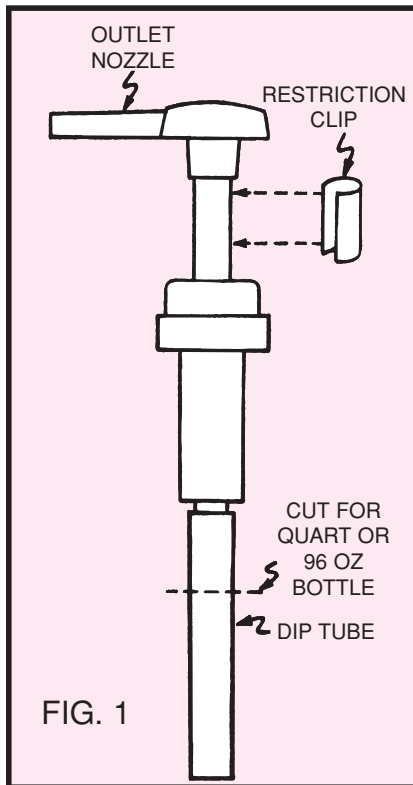
Latex Balloon Size	Latex Balloon Type	Number of Balloons Per 242 Helium Tank	Average Flying Time Helium Only*	Average Flying Time Helium and SUPER HI-FLOAT*	Average Flying Time Helium and ULTRA HI-FLOAT*
11"	STANDARD COLORS	485	12-24 hrs.	4-10 days	1-4 weeks
11"	METALLIC & PEARLIZED	485	12-18 hrs.	4-7 days	1-3 weeks
14"	ROUND	240	26-30 hrs.	8-14 days	2-5 weeks
16"	ROUND	180	30+ hrs.	14-20 days	3-7 weeks
18"	ROUND	130	36+ hrs.	16-24 days	3-8 weeks
17"	HEART	268	14 hrs.	2-3 days	3-8 days
16"	GEO DONUT®	340	22-26 hrs.	3-5 days	4-12 days
16"	GEO BLOSSOM®	400	18-24 hrs.	2-4 days	3-10 days
24"	ROUND	50	2-4 days	18-30 days	4-10 weeks
3'	GIANT	15	3-5 days	4-8 weeks	6-20 weeks
* Please remember that these are estimates based on typical indoor conditions and following all of the instructions contained in this book. Flying time will be less if outdoors. Flying time varies greatly due to factors such as latex quality, humidity, temperature, altitude, etc. Balloons typically float half as long in hot, humid weather. For maximum floating life, hand-tie balloons.					

INSTRUCTIONS

Basic directions

Attach the dip tube to the bottom of the pump as shown in Fig. 1. The nipple on the bottom of the pump fits inside the end of the dip tube. For bottles other than gallon size, cut off the dip tube as follows:

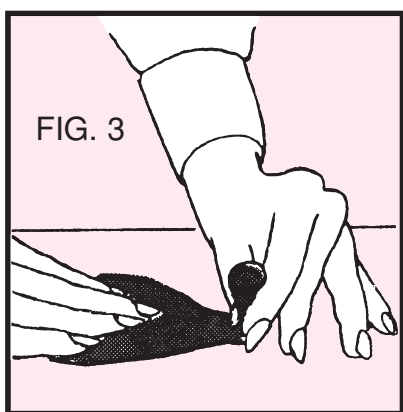
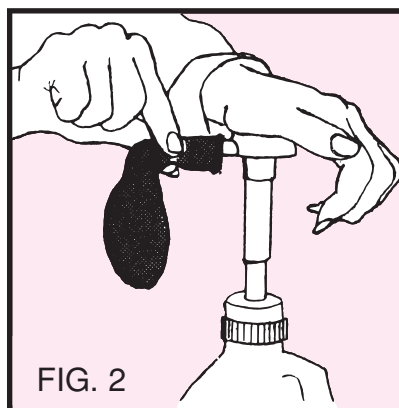
Bottle Size	Dip Tube
96 oz.	Cut to 5 ¹ / ₂ inches
Quart	Cut to 1 ³ / ₄ inches
24 oz.	Do not use dip tube



Place the pump on the bottle and prime it by pumping a few times until liquid comes out. Snap the correct restriction clip onto the pump as shown in Fig. 1. Clips are color coded as follows:

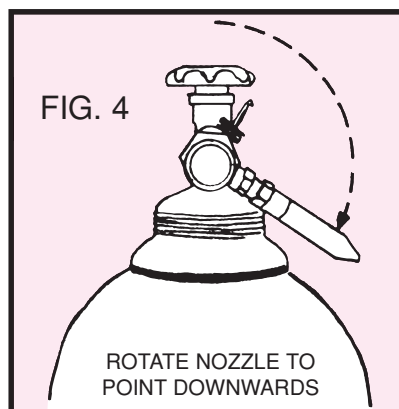
Balloon Size	Clip for ULTRA HI-FLOAT	Clip for SUPER HI-FLOAT
11"	white	blue
14"	2 strokes white	yellow
16"	yellow	green

Slide the balloon onto the pump outlet as far as it will go in order to inject the HI-FLOAT deep inside the balloon as shown in Figure 2. The end of the pump nozzle should be in the bulb of the balloon. Depress the pump plunger as far as it will go. Remove the balloon from the pump. Pinch the neck of the balloon as you remove it to clean off the nozzle and keep HI-FLOAT out of the stem of the balloon. **ULTRA HI-FLOAT is much easier to pump if the bottle is kept in a warm location.**



Make sure the pump returns to the full upright position after each stroke. If necessary, lift up on the cap before treating the next balloon. Gently rub the bulb of the balloon a couple of times as shown in Figure 3 to spread the liquid over the inside surface. While rubbing, hold the balloon opening elevated to allow the air to escape and to prevent liquid from entering the stem of the balloon.

Inflate the balloon in the usual manner and hand tie. We recommend rotating your helium nozzle downwards as shown in Figure 4 to reduce splatter and help keep the liquid out of the balloon stem. A key to minimizing mess when using HI-FLOAT is to keep it out of the balloon stem where it can leak onto the hands when tying.



If the balloon does not float, or leans to one side when first inflated, see instructions on page 6.

With a little practice you should be able to treat balloons neatly and quickly.

Pre-treating balloons with HI-FLOAT

Balloons may be pre-treated with HI-FLOAT several days before they will be inflated. This method saves time on the day of a large job since you will not spend time treating balloons on that day. To pre-treat balloons with HI-FLOAT:

Step 1. Treat balloons with the correct amount of HI-FLOAT and gently rub the balloon to spread the HI-FLOAT.

Step 2. Gather treated balloons in groups of 10 and band the necks of the balloons together with a ribbon or rubber band. This will keep the HI-FLOAT from drying out.

Step 3. If you will be inflating the balloons the next day, just leave them on a counter at room temperature in banded groups of 10. If you will not be inflating the balloons the next day, place them in an airtight plastic container in the refrigerator. Pretreated balloons may be kept in the refrigerator for several days.

Step 4. Before inflating balloons allow them to warm to room temperature and gently rub the balloons to re-spread the HI-FLOAT inside the balloon.

Step 5. Inflate the balloons with helium and hand tie.

TROUBLESHOOTING GUIDE

How to get the maximum floating life

Under normal conditions you should see a ten-fold increase in the floating life of your balloons when using SUPER HI-FLOAT and a twenty-five-fold increase using ULTRA HI-FLOAT. In low humidity weather, such as winter, the increase in floating life will be at a maximum. It is normal for treated balloons to float only half as long in summer as they do in winter because of higher heat and humidity.

To get the maximum floating life possible do these nine things:

- 1 Use ULTRA HI-FLOAT.** It gives twice the floating life as SUPER HI-FLOAT under all weather conditions.
- 2 Add the full recommended amount of HI-FLOAT.** Adding less HI-FLOAT will shorten floating life and cause balloons to decrease in size more quickly. Adding less HI-FLOAT can also cause cloudiness or haze to form on the inside of the balloon.
- 3 Inflate the balloons fully.** The balloon should float straight up when first inflated. If it leans to one side or doesn't float at all, you probably have not inflated the balloon large enough. It is normal for the balloon to not have much upward lift when first inflated. However the upward pull will increase as the balloon dries over a couple of hours.
- 4 Ideal temperature for HI-FLOAT treated balloons is 72 to 80 degrees.** In hot weather keep the balloons in an air-conditioned location for at least the first few hours so they may dry quickly. In cold weather keep the balloons in a heated location for the first few hours. HI-FLOAT does not begin to hold in helium until it dries.
- 5 In rainy weather you must run the heater or air-conditioner when inflating HI-FLOAT treated balloons.** High humidity when the balloons are inflated will dramatically reduce the floating life. A room dehumidifier will also solve this problem.
- 6 Exposure to direct sunlight will shorten the floating life of balloons.**
- 7 Use specially ventilated HI-FLOAT Balloon Transport Bags for transporting balloons.** Limit the total amount of time balloons are in bags to no more than 30 minutes. Do not place in a hot car or van; run the air-conditioner first.
- 8 Pearlized and metallic colors float about a third less time than regular colored balloons.** If you need the maximum floating life possible, don't use pearlized or metallic colors. Also, heart shaped, Geo Blossom® and Geo Donut® balloons float much less time than regular balloons. See additional instructions for treating these balloons on page 7.
- 9 Hand tie the balloons.**

One final caution on floating life. Balloons inflated when the helium cylinder is almost empty (less than 300 pounds pressure) may not float as long as balloons inflated from a full cylinder.

Balloons don't float when first inflated

Treated balloons should float straight up when first inflated. If your balloon does not float straight up or leans to one side, then you either have too much HI-FLOAT in the balloon or not enough helium.

Check to make sure you are using the correct restriction clip on the pump and that you are not using a helium/air mixture to fill the balloon.

Make sure the balloon is **fully inflated**. The balloon should be inflated until it begins to become pear shaped. Some people first inflate their balloons with air to stretch them. They then inflate them with helium. This allows the balloon to be inflated to a larger size.

Your balloons will get more buoyant as the HI-FLOAT dries. When completely dry, the balloon will float with nearly the same upward force as an untreated balloon.

Reducing splatter inside balloons

When using HI-FLOAT in clear or transparent balloons, some uneven runs of liquid may be visible initially. These will gradually disappear as the coating dries.

This splatter can be minimized in a number of ways. Use ULTRA HI-FLOAT. Since you use less it will be less visible. Try inflating the balloon more slowly with the helium nozzle pointed in a downward direction. Also, when rubbing the balloon to spread the coating, rub gently to avoid working bubbles into the liquid.

If the HI-FLOAT is very old and has begun to get thick and stringy (gel) it will be more visible inside the balloon. This gel can be redissolved by heating as described on page 9.

Special tips for using HI-FLOAT on decorating jobs

When treating balloons to decorate large areas such as reception halls, shopping centers, etc., it is always a good idea to test a few balloons beforehand in the actual location where the decorations will be in order to determine the actual floating life under these conditions of humidity, temperature, etc.

In hot, humid weather many problems can be avoided if the air-conditioning system can be left on while the decorations are up. If this is not possible, at least make sure the air-conditioning is on for the first few hours after the decorations are finished. This will speed drying and will give a much longer floating life.

Treating heart shaped, Geo Blossom® and Geo Donut® balloons

Heart shaped, Geo Blossom® and Geo Donut® balloons normally float for a much shorter time than round balloons. To get the maximum floating life with these balloons use the following method:

Step 1. Inflate the balloon fully with air to stretch it, then deflate it entirely.

Step 2. Inject ULTRA HI-FLOAT using the white clip for 11-inch heart shaped balloons, 16-inch Geo Donuts®, and 16-inch Geo Blossoms®, or the blue clip for 17-inch heart shaped balloons. NOTE: If the balloon is not floating when first inflated add less HI-FLOAT. You may need to only push the pump down $\frac{3}{4}$ of the way, especially when treating Geo Blossoms®.

Step 3. Rub the balloon to spread the ULTRA HI-FLOAT around.

Step 4. Inflate the balloon as large as possible with helium and hand-tie.

Treating pearlized and metallic balloons

Pearlized and metallic balloons float about a third less time than regular colored balloons. To get the maximum floating life possible use one of the following methods:

Method 1. Inject the ULTRA HI-FLOAT into the balloon the day before it is to be inflated, using the correct pump clip. Rub the balloon in the normal manner to spread the ULTRA HI-FLOAT around when it is injected into the balloon. Treat several balloons in this manner and then gather them together by placing a rubber band around their necks to keep the ULTRA HI-FLOAT from drying out. The next day briefly rub the balloon a second time and then inflate with helium.

Method 2. (Will give about the same increase in floating time as above.) Inflate the balloon with air to stretch it. Then deflate the balloon, treat it with ULTRA HI-FLOAT in the normal manner, and inflate with helium.

HI-FLOAT or SUPER HI-FLOAT “beads up” inside balloons

HI-FLOAT and SUPER HI-FLOAT work well on all major brands of latex balloons. However, occasionally we find a balloon which has an oil coating which interferes with the HI-FLOAT wetting the inside of the balloon. When this happens the HI-FLOAT or SUPER HI-FLOAT “beads up” similar to water on a freshly waxed car. In this case treatment gives very little increase in floating life. Use ULTRA HI-FLOAT with these balloons and you should not have this problem.

Haze on inside of balloons

Shortly after inflating a balloon you may notice a haze or cloudiness on the inside of the balloon. (Oxidation occurs on the outside of the balloon.) This may be caused by adding less than the full recommended amount of HI-FLOAT. Make sure you are using the correct colored clip for that size balloon.

Cleaning HI-FLOAT

Allow adequate drying time for balloons to avoid clean-up jobs. We recommend using ULTRA HI-FLOAT since there is less mess. We also recommend allowing balloons to dry a couple of hours before giving them to customers.

HI-FLOAT is completely soluble in water, even after it has dried. It dissolves much quicker in hot water.

On nonporous surfaces such as counter tops, allow spilled liquid to dry then simply peel it up and discard.

On machine washable fabrics wash in warm or hot water if possible. Presoak a few hours if the HI-FLOAT has completely dried.

For dry cleaning, you must inform the cleaner that the spot is soluble in water and/or steam.

On upholstered fabrics the HI-FLOAT can be removed by dipping a toothbrush into a cup of hot water and rubbing the spot to soften it. Then blot with a dry towel. Repeat wetting and blotting several times as necessary. After drying, if any trace remains, repeat the procedure. Brush felted fabrics to restore nap.

Product discolors in the bottle (mold)

A dark green mold can grow on the surface of HI-FLOAT in a bottle which has been opened for several months. This is very similar to the mold which grows on bread. If this happens scoop off and discard the discolored material. Quickly use the remainder of the bottle.

Do not pour the small amount left in an old bottle into a new bottle since this can seed the new bottle with mold. Wash off the pump when transferring to a new bottle.

If mold is a recurring problem in your area, purchase HI-FLOAT in smaller size bottles since it will be used more quickly.

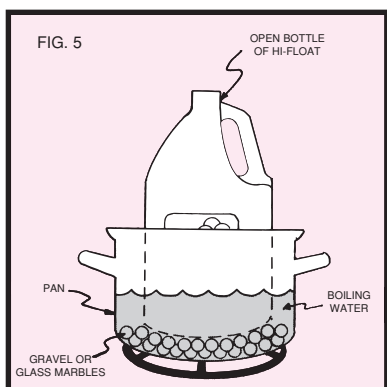
Cleaning the pump dispenser

A pump dispenser should last through several bottles of HI-FLOAT. The pump may be cleaned as follows:

- Unscrew the top of the pump and place both sections in a pan of hot tap water. Let stand overnight.
- Rinse the pump parts with warm water. Make sure the air holes under the threaded cap are clean. Reassemble.

Product gets too thick to pump (gel)

ULTRA HI-FLOAT may gel and become hard to pump if it has been



frozen. If your product becomes too thick to pump, it can be redissolved in one of the following ways: (1) Remove the cap and heat in a microwave until hot but not boiling. Stir after removing from microwave, or (2) Pour HI-FLOAT into a double boiler and heat on a stove, or (3) Remove the pump or cap and place a bottle in a pan of water as shown in Figure 5. Boil the water in the pan for about two hours. This will heat the liquid sufficiently to dissolve any gel, or (4) With the cap on, float the

bottle of HI-FLOAT in a sink full of the hottest tap water possible for four hours. Replace the hot water and shake the bottle every hour.

WARNING! IMPORTANT SAFETY NOTES:

Place a one-inch layer of gravel or glass marbles in the bottom of the pan as shown in Fig. 5 to keep the plastic bottle from touching the pan during heating.

Do not allow the water in the pan to boil dry since this will melt the plastic bottle.

Do not heat the bottle without first removing the pump or bottle cap since this could build up pressure and rupture the bottle resulting in burns or serious injury. Heat only an **open** bottle.

Do not heat HI-FLOAT directly with gas or electrical heat since this will scorch the HI-FLOAT and ruin it. The HI-FLOAT must be heated by placing the bottle in a pan of heated water as shown in Figure 5, or using a double boiler.

Allow the HI-FLOAT to cool to room temperature before handling to avoid the possibility of burns or injury.

ANSWERS TO FREQUENTLY ASKED QUESTIONS

Is HI-FLOAT toxic?

HI-FLOAT, SUPER HI-FLOAT, and ULTRA HI-FLOAT are not toxic. They are very similar to the adhesive found on the back of postage stamps. Although non-toxic, keep out of the reach of children. If splashed into the eyes flush with water for several minutes.

What is the shelf life?

The shelf life of HI-FLOAT is at least a year after purchasing for unopened bottles and at least three months after the bottle is opened. Use your oldest material first to avoid accumulating product with excessive age.

How many balloons will a bottle treat?

Balloon Size	SUPER HI-FLOAT Gallon	SUPER HI-FLOAT Quart	ULTRA HI-FLOAT 96 oz.	ULTRA HI-FLOAT 24 oz.
11 inches	540	135	568	142
14 inches	290	72	405	101
16 inches	160	40	216	54

How much does it cost to treat a balloon?

The average cost per balloon is shown below.

Balloon Size	Cost
11 inches	5-6 cents
14 inches	10-11 cents
16 inches	15-17 cents

Most people charge extra for treated balloons. **By charging just 25 cents extra to treat a balloon, you will earn over \$100.00 extra profit for each gallon or 96 oz. bottle of HI-FLOAT you use!**

How much to use in giant balloons?

BALLOON SIZE	Amount of ULTRA HI-FLOAT	Amount of SUPER HI-FLOAT
24 inches	1 stroke with green clip	3 strokes yellow clip
30 inches	3 strokes with yellow clip	4 strokes with yellow clip
36 inches	4 strokes with yellow clip	3 strokes with green clip
40 inches	5 strokes with yellow clip	4 strokes with green clip
48 inches	$\frac{1}{2}$ cup (add through funnel)	$\frac{3}{4}$ cup (add through funnel)
60 inches	$\frac{3}{4}$ cup (add through funnel)	1 cup (add through funnel)

For maximum floating life keep balloons in a place of low humidity the first several hours after inflation.

Does altitude affect floating life?

Yes. Balloons do not float as well at higher altitudes. Use ULTRA HI-FLOAT since it is concentrated and will add less weight to the balloon. If necessary, add slightly less than the full recommended amount or pre-stretch the balloon with air before inflating.

Does HI-FLOAT work on foil balloons?

No. Foil balloons are not buoyant enough and will not float when treated. For very long floating life we recommend a 16-inch latex balloon treated with ULTRA HI-FLOAT.

Does freezing hurt HI-FLOAT?

ULTRA HI-FLOAT may become thick and lumpy if frozen. See instructions on page 9 for heating to redissolve.

Freezing does not affect the performance of HI-FLOAT or SUPER HI-FLOAT liquid. Allow it to thaw for about a day at room temperature before using. If balloons are to be taken outdoors in extremely cold weather (below 0°F or -18°C) use regular HI-FLOAT instead of SUPER or ULTRA HI-FLOAT.

What causes a large percentage of balloons to sometimes burst?

Sometimes, for no apparent reason several balloons begin bursting. This may be caused by static electricity brought about by changing weather conditions. This happens with or without HI-FLOAT. Try spraying "Static Guard" around your work area to reduce balloon loss.

Where can I get further help?

Further questions can be answered by your distributor or by phoning or writing the HI-FLOAT Co., 13025 Middletown Industrial Blvd., Louisville, Ky. 40223, Phone: (502) 244-0984, Toll-free in U.S.: (800) 57-FLOAT. Email: info@hi-float.com. You may purchase the *HI-FLOAT Tips and Designs Video* from your distributor or by calling the HI-FLOAT Co. directly.

You may also visit our web site at www.hi-float.com.

SPECIAL DESIGN TRICKS USING HI-FLOAT

Coating the Outside of Air Filled Balloons After Inflation

A dilute HI-FLOAT coating may be applied to the outside of a latex balloon after it is inflated to keep it from oxidizing (turning chalky). This is especially useful for those arrangements where items such as stuffed animals are put inside of clear balloons and it is important that the balloon remain clear for a long time. Treating the outside of an air-filled clear balloon will keep it bright and clear for several weeks if it is cared for properly. Fig. 6 shows a bear in a balloon where one-half of the balloon has been coated with HI-FLOAT. The treated half remains clear even after several weeks! The uncoated half started turning chalky in a few days.

Warning: Air filled balloons having an external coating of HI-FLOAT must be kept in an air-conditioned location in hot weather. Exposure to heat and/or high humidity can cause the balloon to burst or deflate prematurely. We recommend using **regular** HI-FLOAT for all coatings on the outside of balloons. ULTRA HI-FLOAT is not suitable for this use.

This dilute coating method does not work well on helium filled balloons since it can cause streaking.

Step 1. Inflate the balloon and stuff it as usual.

Step 2. Attach the stuffed balloon to a cup and stick to provide a handle.

Step 3. Mix one cup of HI-FLOAT with two cups of warm water. Stir gently to avoid making foam.

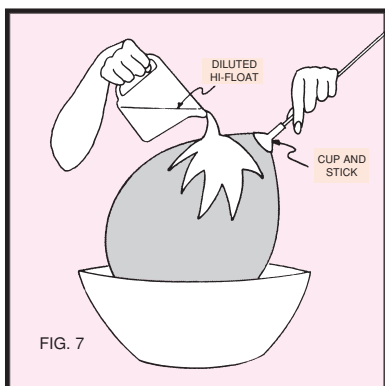
Step 4. Place the balloon in a large pan and gently pour the liquid over it while slowly rotating the balloon as shown in Figure 7. Make sure the entire outside surface of the balloon is wetted.

Step 5. Hang the coated balloon up by the handle so that it can drip and dry. Under normal conditions drying takes about 30 minutes.



FIG. 6 BEAR IN A CLEAR BALLOON THREE WEEKS AFTER INFLATION

Left half coated on the outside with dilute HI-FLOAT remains clear and shiny. Uncoated right half is heavily oxidized.



Drying can be quickened by using a hand held hair dryer. Do not aim the blower at one spot too long since this could burst the balloon.

The liquid which drains into the pan may be placed in a capped bottle and saved for reuse. Refrigerate during storage to keep mold from forming.

Any bubbles in the coating will collect at the lowest point. Wipe this spot gently with a damp sponge after drying about 15 minutes. After drying, touch up any missed spots with a small brush.

Do not dilute the HI-FLOAT more than two parts water to one part HI-FLOAT. A more dilute solution will not wet the balloon surface properly and the final coating will be spotty.

Never use dilute HI-FLOAT for coating **uninflated** balloons since the diluted HI-FLOAT will not cover the entire surface of the balloon after inflation. Use the diluted material only for coating balloons which are **already inflated**.

This outside coating will also remove oxidation which has already occurred.

This technique will keep balloon animals made from twisted 260 balloons looking big and shiny for several days. Simply place the animal in a pan, pour the diluted mixture over it, and hang it by the knot until dry.

Coating the outside of balloons before inflation

This method is a quick way to apply a **regular** HI-FLOAT coating to the outside of balloons **before** they are inflated. It can be used for helium-filled balloons. This method will increase the floating life about five times and has the added advantage of keeping balloons from oxidizing for an extended period. The coating usually dries in a few minutes. A disadvantage of this technique is that it is somewhat messy.

Step 1. Place an uninflated balloon over a pencil and dip the balloon into a glass of HI-FLOAT to the stem as shown in Figure 8. Keep the liquid out of the inside of the balloon. Make sure the entire outside of the balloon is wetted except for the stem. If folds form in the balloon withdraw it from the liquid and then redip it to wet the entire outside.

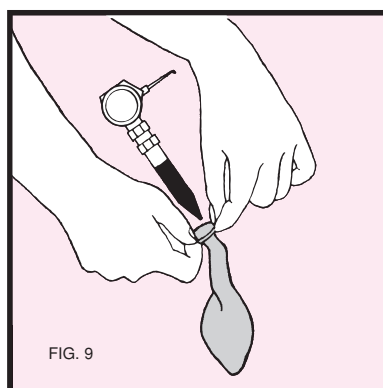
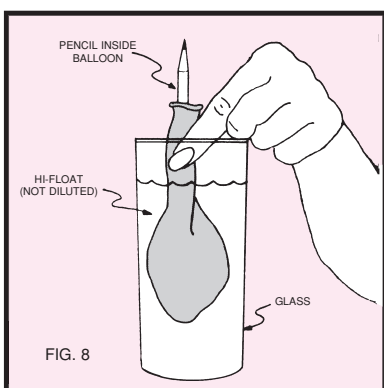
Step 2. Remove the balloon from the liquid and let it drain for a couple of minutes.

Step 3. With the helium nozzle pointed downward as shown in Figure 9, slip the balloon onto the nozzle and inflate it while the balloon is still wet. The balloon will stop dripping as soon as inflation begins. It will dry within a few minutes.

Step 4. Seal the balloon and attach a ribbon. Try not to touch the balloon except near the stem until it is dry.

NOTE: ULTRA HI-FLOAT is not suitable for this use.

It is a good idea to wear protective eyewear when inflating balloons that have been coated on the outside with HI-FLOAT.



Food coloring balloons

Try this technique to make beautiful marbled balloons that resemble dyed Easter eggs as shown in Fig. 10.

Use the white clip on the pump to add SUPER or ULTRA HI-FLOAT to the inside of some 11-inch white latex balloons. Next, add 2 or 3 drops of food coloring to the balloon such as red, yellow, or blue. At first try just one color per balloon. Rub the outside of the balloon to mix the food coloring and HI-FLOAT and to spread it around. Then inflate the balloon with air or helium in the usual manner.



FIG. 10. FOOD COLORING BALLOON ARRANGEMENT

If you don't like the color pattern, deflate the balloon, rub it some more, and then reinflate it to get a different pattern. No two are alike!

For a more elegant look use pearlized white balloons instead of plain white.

You will be surprised at the beauty of these custom colored balloons. By blending you can make any color you want. The colors will darken slightly on drying. If "runs" form use slightly less HI-FLOAT. For variation, use clear balloons instead of white ones and add a little glitter for added sparkle. Or, use with pastel colored balloons to achieve many beautiful colors.

Confetti on inside of clear balloons

The very festive and eye-catching arrangement shown in Fig.11 can be made by putting colored foil confetti in balloons as follows. Add SUPER or ULTRA HI-FLOAT to a 16-inch clear balloon using the blue pump restriction clip. Rub the outside of the balloon in the usual manner to spread the coating over the inside surface. Then blow a puff of air into the balloon so the sides are not touching.

Next, add about one-third of a cup of chopped foil or other soft confetti into the balloon through a canning funnel. You can make this confetti by cutting up some old foil balloons which have popped, or you may buy it already chopped from several distributors. Then inflate the balloon with helium to about the size of a grapefruit. Shake it vigorously to spread the confetti uniformly around inside the balloon.

Finally, inflate the balloon the rest of the way with helium and tie it with rainbow curling ribbon. Attach several of these balloons to a bottle of jelly-beans for a really colorful arrangement.

The key to getting the confetti uniformly spread over the inside of the balloon without forming "clumps" is to **avoid rubbing the balloon after the confetti is added**. Instead, inflate the balloon slightly and shake it.

This same technique can be used to put sparkling glitter inside the balloon.

Note: It is always a good idea to wear protective eyewear when working with confetti.



FIG. 11 CONFETTI ON INSIDE OF CLEAR BALLOON

Confetti on outside of balloons

NOTE: Always use regular HI-FLOAT for coating the outside of balloons.

To make balloons with confetti on the outside as shown in Fig. 12 place the balloon to be coated on a pencil as shown in Fig.8 on page 15 and dip it into a glass of pure HI-FLOAT. Withdraw the balloon and let it drain a couple of minutes.

As you inflate the balloon it will stop dripping. The outside coating of HI-FLOAT will remain wet and sticky for about twenty minutes. You can sprinkle confetti or glitter on the outside of the balloon during this time. Be careful not to use too much or the balloon will get heavy and will not float.

Since the balloon is still wet you will need to be careful to tie it without touching the sides and you will want to keep it from touching other balloons for about a half an hour.

Warning: Air-filled balloons having an external coating of HI-FLOAT must be kept in an air-conditioned location in hot weather. Exposure to heat and/or high humidity can cause the balloon to burst or deflate prematurely.



FIG. 12. CONFETTI ON OUTSIDE OF BALLOON



FIG. 13 SPIDER WEB BALLOON

Spider web balloons

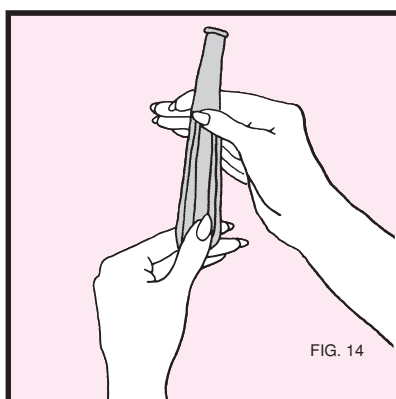
For a really great item at Halloween make some clear balloons with spiders and webs inside as shown in Fig. 13.

First inject a little less than the usual amount of HI-FLOAT in an 11-inch clear balloon, and rub it around to coat the inside. Next put a small rubber spider in the balloon. Then inflate the balloon to about 75 percent of the full size with air, and seal it with plastic disc or clip. Let dry overnight. Place the balloon out in the open where there is good air circulation. It must be very dry in order to form the spider web.

The next day remove the clip and deflate the balloon. Hold it by the stem and the top as shown in Fig. 14 and stretch it a few times to separate the dry film from the wall of the balloon. Then slowly inflate it with helium. When it gets to about full size the HI-FLOAT film will separate from the wall in several places and hang inside the balloon to form a spider web. If the coating does not separate, deflate the balloon, stretch it a couple of more times and reinflate it.

This takes a little practice, but once you've mastered it almost every balloon turns out beautifully.

Since the HI-FLOAT coating inside the balloon is no longer intact, the balloon will not have an extended floating life. A long lasting product can be made by inflating the balloon with air instead of helium and putting it on a cup and stick. Use the dilute coating technique on the outside as shown on page 12 to keep it from oxidizing. It should last for weeks.



Double-stuffed and gumball balloons

To increase the floating time of a double stuffed balloon (an 11-inch colored balloon inside a 16-inch clear balloon) or a gumball balloon (several 5-inch colored balloons inside a 16-inch clear balloon) use the following method:

Step 1. Treat the inside of the 16-inch clear balloon with ULTRA HI-FLOAT using the yellow clip. Inflate the balloon with helium and seal with a plastic clip or disc.

Step 2. Allow the balloon to dry for at least twenty-four hours. Then remove the clip, letting only a little helium escape. Insert the smaller 5-inch balloons or the 11-inch balloon. Replace any lost helium and hand-tie the 16-inch balloon. **Note:** the ULTRA HI-FLOAT should be completely dry inside the 16-inch balloon before inserting smaller balloons.

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