

Bloxygen Tricks, Tips, and Instructions

My name is Steven Zawalick and I hope you are happy and healthy. I'm the owner of Bloxygen. My goal is to help you eliminate waste and keep things simple. Happy customers lead to more customers!

Bloxygen SOLVES THE PROBLEM:

Varnish crust over? Paint turned to gel? Glue crust up? Bloxygen can help. Bloxygen (for "blocks oxygen") is a heavy inert gas that prevents oxygen or moisture damage during storage. Preserve and use every drop of your material; just spray, seal, and store.

In the USA alone, about 10 million gallons of oil-based finishes are thrown out each year. That's a solid line of quart cans from Los Angeles to New York tossed each year. Each can of Bloxygen can protect SEVENTY FIVE quarts from oxygen or moisture damage.



INSTRUCTIONS (see label for all warnings):

First, ALWAYS wear Safety Glasses; the flow of gas can cause splashing.

1. Twist the extension tube firmly into the spray tip.
2. Hold lid closely above container and spray towards side of the container to avoid any splash.
3. Spray 2 full seconds for quart containers and 4 full seconds for gallon containers. *
4. Close lid immediately to seal in heavy gas.

*We recommend 2 seconds for quarts and 4 seconds for gallons assuming that they are half full. Our "rule of thumb" is to spray enough argon gas into the container to fill the head space twice. So you'll need less gas if the container is nearly full and more if it is nearly empty.



WHY IT WORKS:

During storage, the oxygen or moisture that's sealed in the container continues to cure and thicken your leftovers, ruining them. This is wasteful, time consuming, and messy. Sometimes, hardened particles can clog spray guns, run the final finish, or destroy the remaining liquid.

Bloxygen uses ultra-pure Argon, a powerful and natural inert gas to drive the oxygen and moisture out of your container. Simply blow the oxygen out of your container with Bloxygen and then seal the lid. The heavy, inert Bloxygen gas sinks down to block oxygen from the liquid surface. Because Bloxygen is heavier than air, it will separate the liquid surface from any air that may remain in the container.

BENEFITS:

- Use all your finish, not just the first half
- Prevent changes in product chemistry during storage
- Save time by making finishing projects easier and cleaner
- Store your leftovers safely, in the original labeled container
- Reduce your hazardous waste / product loss
- Avoid paying a premium for small volumes of finish
- Eliminate spray gun clogs and jams



USE BLOXYGEN ANY TIME YOU ARE STORING:



ANYTHING that is sensitive to oxygen or moisture:

Oil Based Paint, Stain, Oil-based Inks and Stains, Varnish , Urethane, Polished Metals, Polyurethane, Printing chemicals, Gunpowder, Catalysts, Auto Body Chemicals and Coatings, Photo Chemicals, Furniture Refinishing Chemicals, Chemical Compounds, Fuel Additives, Coffee, Marine Coatings, Glue, Guacamole, Tung Oil, Epoxy, and more. YES, Bloxygen is food safe and can be used on Wine, liquors, or even guacamole!

NEW USE?

If you have a new and different application, send us the info; we'll send you a free can! Yes, we know you can use it on wine. :-)

Some good ones recently: killing book mites, preserving display food items, preserving a collection of the elements, recharging argon filled windows, conformal coatings (circuit boards), mold making chemicals.

LATEX PAINT?

Bloxygen will not help with problems in water-based finishes or lacquer. These products don't cure via oxygen absorption. In our experience, using a spray bottle of water and spritzing the inside of the can and underside of the lid helps latex during storage.

MSDS or SDS? Our Safety Data Sheet is below.

OTHER IDEAS AND SOME HISTORY:

What about other solutions? For years this problem has frustrated woodworkers and finishers. Of all the attempts to solve this problem (see below) none we've seen are as quick, as safe, or as successful.

What about marbles? Some folks try to eliminate the air space in their container by throwing marbles or rocks in the liquid. In addition to contaminating their product, they often find that cleaning the marbles results in lots of wasted time and product.

What about a smaller container? Transferring your liquid to a smaller container will reduce the air space, but you'll still have oxygen in there. Since the labeling was on the original container, tracking the instruction labels and warnings could be a problem.

What about exhaling into the container? As scuba divers or paramedics know, the air we exhale is NOT oxygen free. We inhale 21% oxygen and exhale about 15% oxygen.

What about tipping the container over? Storing your leftovers upside down will only guarantee that the skin will form on the "bottom" of the liquid. Your finish will still be ruined.

CO₂? We use ultra-pure Argon because it's totally inert. CO₂ is okay, but it's not totally inert and will react with water to form carbonic acid. If you want to liquify CO₂, you need a stronger container than an aerosol can...think paintball or BB gun. They are thicker steel. A container with liquid and gaseous CO₂ is about 870psi at room temp.

What about Air Dusters? The compressed gas dusters contain difluoroethane CAS #75-37-6 which is flammable when concentrated in a fuel/air concentration of 5.1-17.1% by volume. Inert gases do not burn. Given that this is NOT an inert gas, no sound prediction can be made about the effect it will have on the millions of different finishes out there.

What about Propane? No. Just NO. This is dangerous.

HOW LONG WILL THE BLOXYGEN LAST?

Your Bloxygen can has an infinite shelf life. In use, each can will provide about 150 seconds of gas. That's enough gas for 75 uses in quarts. Given that a quart of premium varnish can cost \$40 or more, saving just one half of one quart will pay for your Bloxygen. The additional 74 uses are "free."

Bloxygen treated varnishes can last ten years and more.

A DANGEROUS GOOD?

Bloxygen can be shipped, but the US Postal Service calls it a "dangerous good." This applies to any pressurized container and requires some extra paperwork. Our containers are DOT-reg. 2Q plus (18 bar) steel aerosol cans and they are shippable as a Limited Quantity ID 8000 item (UN# is 1006 / 2.2). The USPS requires a "Shipper's Declaration for Dangerous Goods" in triplicate. Contact us for sample forms.

WHAT REALLY IS ARGON?

Bloxygen uses ultra-pure argon. This gas is a natural component of our air and the third most common gas on Earth at (about 1%). A full can, because it contains only a gas, feels empty. The gas is non-toxic, non-flammable, and inert. Deliberately misusing Bloxygen by concentrating and inhaling it can result in rapid suffocation, asphyxiation, and perhaps death due to lack of oxygen. Do NOT inhale it directly! There are no CFCs, VOCs, or added propellants. It's totally natural.

PROBLEMS?

What if you have a problem with Bloxygen? We will make EVERY effort to satisfy any concern. Call us. We will help. There are only three problems we've ever seen:

- **Not Enough Gas Used:** The entire storage container must be purged. You cannot use too much Bloxygen.
- **Slow Lid Seal / bad seal:** Once the container is purged, the lid must be immediately sealed into place. Make sure that the lid is spotless and dent free to create an airtight seal.
- **Bad Finish:** Once oil-based finishes absorb oxygen and skin over or gel, they will continue to have problems during storage. These finishes will never be the same.

Always start with NEW finish, minimize exposure to air, and use Bloxygen each and every time it's returned to storage.

IS IT GUARANTEED?

YES! We want to make sure you are 100% satisfied with our product. That's why we use only the best components made in the USA and assemble and fill our cans here in the USA. We've made and sold this for 20 years now and we are much more interested in keeping happy customers and good reviews than profit. Simple.

Yes, the cans FEEL empty. Spray some gas onto your wrist or behind your ear. You should be able to feel or hear it. If you can squeeze in the sides of the can, it's empty.

Relative to initial pressure, we have seen leaks and sometimes our cans are tampered with (store shelves). Our initial can pressure is at the limit of a DOT 2Q container, 160psi. That's about three times higher than a spray paint can or a can of air freshener. Given that we are using such high pressures, we use specialty components and sometimes they do fail. If your can leaks or arrives empty, just contact us at the address below (email is IronWood.Designs@pobox.com) and, if possible, provide the codes on the bottom of the can so we can track these issues. We will ship a replacement to you immediately.



BEST PRACTICE? PRO MOVE? PAINT STORE HACK?

Yep, here's the trick. When the container of finish is opened, pour the required amount of finish into a second, container. Take time (and perhaps use a product like the Paint Plow) to ensure that the original paint can lid and groove are clean. Now use the Bloxygen to purge and protect the finish container, seal it, and store it.

This will minimize the amount of time that oxygen and moisture can interact with the original product.

The finish used in the secondary container should be used up or properly discarded. It will have been exposed to oxygen, moisture, an applicator (rag, brush, etc.) and cannot be returned to your container because of this contamination.

HOW CAN I TEST / DEMONSTRATE BLOXYGEN?

The testing we do is simple. We use two 40 ml sample bottles,* each filled halfway with the subject liquid. One vial is simply sealed as a "control" and the test container is carefully gassed with Bloxygen and then sealed. Once they are sealed, label and date them. To simulate use, open each vial once a week, remembering to use Bloxygen when sealing the test container. The sample protected with Bloxygen should remain the same as when new. Some of the unprotected "control" vials may get thicker as their viscosity increases; others will actually skin over. While some heavy-bodied paints will take weeks to show a difference, finishes like Behlen's Salad Bowl Finish will skin over unprotected in a number of days. Check your sample by viewing the liquid moving around in the Bloxygen vial and compare that to the rigid skin in the unprotected sample.

Jasco Tung Oil or Behlen Salad Bowl Finish skin over quickly and make for a great demonstration. Unopened, we have samples that are 6-10 years old and still are perfect.

*Cole-Parmer Instrument Co. number E-08918-24, 3 7/8" x 1 1/8";borosilicate vial with rubber seal. 1-800-323-4340.

Both vials contain three year old varnish.
One was simply sealed and ruined from
oxygen damage. The other remains protected
with Bloxygen and is ready to use:



Bloxygen®

FINISH PRESERVER

Inert Gas System prevents damage
from oxygen or moisture

Preserves stains, varnishes, oil-based paints,
chemicals, resins, and more

DOES BLOXYGEN MEET THE MILITARY SPECIFICATIONS?

Yes. Bloxygen meets Mil Spec MIL-DTL-53072F, Detail Specification - Chemical Agent Resistant Coating (CARC) System Application Procedures and Quality Control Inspection, dated 31 May 2017 and the associated MIL-A-18455C, Military Specification, Argon, Technical, Dated 23 December 1986. Contact us directly for details.

THANK YOU!

Please make sure to tell your friends that you are using high technology inert gases to preserve your oxygen or moisture sensitive products. Below are some great tips from my website at www.bloxygen.com.

YouTube VIDEOS?

Yep. Search for our channel at [BloxygenBoy](https://www.youtube.com/BloxygenBoy). We have:

- Bloxygen [Basics](#)
- Bloxygen [Uses](#)
- The Bloxygen [Kit Tools](#)
- Sponsored [Videos](#)

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