

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:

Did your 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, nearly 70 million gallons of paint and 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.



YouTube VIDEOS:



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: purging night vision scopes, killing book mites, preserving display food items, preserving a collection of the elements, recharging argon filled windows, preserving leftover conformal coatings (for circuit boards), and preserving 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.

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.

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) or scan this with your phone camera and click the link:

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



Steven Zawalick, Owner, IronWood Designs – Bloxygen, P.O. Box 13838, San Luis Obispo, CA 93406
(888) 810-8311 - IronWood.Designs@pobox.com - www.bloxygen.com

Bloxygen - Finish Preserver Spray, Seal, and Store

Preserves oxygen or moisture-sensitive products:



- oil-based paint
- varnish
- polyurethanes
- catalysts
- photo chemicals
- tung oil
- wood fillers
- urethanes
- stains
- gunpowder
- marine coatings
- printing chemicals
- lab chemicals
- sign paints
- autobody chemicals
- refinishing products
- some glues
- epoxy resin
- wine, hops, seeds
- cooking oils



Benefits of Bloxygent:

- Protect anything sensitive to oxygen or moisture damage
- Bloxygen inert gas preserves leftover paint, stain, varnish, etc.
- Reduce your hazardous waste / product loss
- Prevent changes in product chemistry during storage
- Store your leftovers safely, in the original labeled container
- Avoid paying a premium for small volumes of finish
- Improve the quality of the final application
- Eliminate spray gun clogs and jams



20 cents per use



Order Bloxygen®



Shipping Label:

Ship to: _____

Phone: _____

Return this form to:

IronWood Designs
P.O. Box 13838
San Luis Obispo, CA 93406-3838
Phone and Fax (888) 810-8311
IronWood.Designs@pobox.com
See us at www.bloxygen.com

<input type="checkbox"/> ONE Bloxygen Can	\$15.95
<input type="checkbox"/> TWO Bloxygen Cans	\$30.40
<input type="checkbox"/> THREE Bloxygen Cans	\$44.70
<input type="checkbox"/> FOUR Bloxygen Cans	\$57.60
<input type="checkbox"/> 12 Bloxygen Cans	\$155.40
<input type="checkbox"/> ONE Can Bloxygen KIT	\$17.45
<input type="checkbox"/> TWO Can Bloxygen KIT	\$31.80

Total of items _____

Free shipping !

* KIT contains one Paint Spout and one Paint Plow: "our best practice" recommendations.

Satisfaction
guaranteed.
Made in the
USA.



Paypal address:
IronWood.Designs@pobox.com

_____ Exp _____
Security Code on the back of the card = _____
Billing Address: House # _____ Zip Code _____





Bloxygen

FINISH PRESERVER

It's simple, just Spray, Seal, and Store. The ultra pure and natural Argon is nature's preservative and will prevent storage damage from oxygen or moisture. Use every drop of your expensive finishes and eliminate waste, prevent spray gun clogs, and simplify finishing. Use our patented inert gas technology and save time and money.

Is Bloxygen Expensive? No. Each can of Bloxygen lasts for 75 uses in quarts. Bloxygen only costs about 20 cents per use.

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 find that cleaning the marbles results in lots of wasted time and product.

What about exhaling into the container? As paramedics know, the air we exhale is NOT oxygen free (in fact, it will support life). 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.

Will it work? Bloxygen was tested successfully by all major paint manufacturers and even NASA. Solid science led to recommendations from all the major paint manufacturers and excellent media reviews.

What can we use it on? Argon is used in many applications, from packaging salad and potato chips to welding. Basically, Bloxygen will prevent loss in any oxygen or moisture sensitive product:

oil based paint, marine coatings, varnish, polyurethane, sign paint, printing chemicals, catalysts, photo chemicals, tung oil, wood fillers, urethanes, stain, gunpowder, epoxy resin, glue, auto body chemicals, fuel additives. Since Bloxygen is food safe, you can also use it on coffee, wine, oils, hops, seeds, cannabis, and even guacamole!

What if I have a problem? There are only three problems we've ever seen:

- Not Enough Gas Used: The entire storage container must be purged of oxygen. You cannot use too much Bloxygen.
- Slow Lid Seal or a bad seal: Once the container is purged of oxygen, the lid must be immediately sealed into place. Make sure 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. Start with new finish and use Bloxygen each and every time it's stored.



www.bloxygen.com
(888) 810-8311
IronWood.Designs@pobox.com

Argon

Safety Data Sheet

Prepared per <https://www.osha.gov/dsg/hazcom/hazcom-appendix-d.html>
Date of issue: 06/23/2023 Supersedes: 2023 Version: 3.0

SECTION 1: Identification

1.1. Identification

Product Identifier : Bloxygen Inert Gas Preservation System
Product form : Limited Quantity
Substance name : Argon
Chemical name : Argon
CAS No : 7440-37-1

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Preserve substances sensitive to oxygen or moisture

1.3. Details of the supplier of the safety data sheet

IronWood Designs
P.O. Box 13838
San Luis Obispo, CA 93406
(888) 810-8311
www.bloxygen.com

1.4. Emergency telephone number

Emergency number : 1-888-810-8311

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Compressed gas H280 - Contains gas under pressure; may explode if heated
Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS04

Signal word (GHS-US) :

Warning

Hazard statements (GHS-US) :

H280 - Contains gas under pressure; may explode if heated
OSHA-H01 - May displace oxygen and cause rapid suffocation

Precautionary statements (GHS-US) :

P102 – Keep out of reach of children.
P103 – Read label before use.
P202 - Do not handle until all safety precautions have been read and understood
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
P308+P313 - If exposed or concerned: Get medical advice/attention
P412 – Do not expose to temperatures exceeding 50°C / 120°F
Bloxygen is packaged per 49CFR173.306(a)3 as a Limited Quantity consumer commodity.
Bloxygen meets USPS Mailability requirements and can be shipped via passenger aircraft.

Limited Quantity



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2.3. Other hazards

Other hazards which do not result in classification Asphyxiant in high concentrations.

2.4. Unknown acute toxicity (GHS US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Name	Product identifier	%	Classification (GHS-US)
Argon, Compressed (Main constituent)	(CAS No) 7440-37-1	> 99.9	Argon, Compressed Limited Quantity

Full text of H-phrases: see section 16

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, seek medical advice.
- First-aid measures after skin contact : Adverse effects not expected from this product.
- First-aid measures after eye contact : Adverse effects not expected from this product.
- First-aid measures after ingestion : Ingestion is not considered a potential route of exposure.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : May displace oxygen and cause rapid suffocation. If you feel unwell, seek medical advice.
- Symptoms/injuries after skin contact : Adverse effects not expected from this product.
- Symptoms/injuries after eye contact : Adverse effects not expected from this product.
- Symptoms/injuries after ingestion : Ingestion is not considered a potential route of exposure.
- Symptoms/injuries upon intravenous admin : Not known.
- Chronic symptoms : None known.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Fire fighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : The product is not flammable. Packaging, cap, and label are.
- Explosion hazard : Product is not explosive. Heat may build pressure, rupturing closed containers.
- Reactivity : None.

5.3. Advice for firefighters

- Firefighting instructions : In case of fire: Continue water spray or fog until containers stay cool. Use extinguishants to contain the fire. Isolate the source of the fire or let it burn out.

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Protection during firefighting : Standard protective clothing and equipment (e.g., Self-Contained Breathing Apparatus) for fire fighters. Do not enter fire area without proper protective equipment, including respiratory protection. Compressed gas: asphyxiant. Suffocation hazard by lack of oxygen.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Ensure adequate ventilation. Due to the small size and content of each cylinder, an accidental release of this product presents significantly less risk of an oxygen deficient environment or other safety hazard than a similar release from a traditional cylinder.

Allow the gas, which is heavier than air, to dissipate. If necessary, monitor the surrounding area (and the original area of the release) for oxygen. Oxygen levels must be above 19.5% before non-emergency personnel are allowed to re-enter area.

6.1.1. For non-emergency personnel

Protective equipment : Wear protective equipment consistent with the site emergency plan.

Emergency procedures : Escape the danger area by the closest safe route. Mark the danger area. Seal off low-lying areas. Keep upwind.

6.1.2. For emergency responders

Protective equipment : Standard protective clothing and equipment (e.g., Self-Contained Breathing Apparatus) for fire fighters. Equip cleanup crew with proper protection.

Emergency procedures : Evacuate and limit access. Ventilate area.

6.2. Environmental precautions

Try to stop release if safe to do so. For incidental leaks from an individual cylinder or valve, contact the manufacturer for a replacement.

6.3. Methods and material for containment and cleaning up

For containment : Try to stop release if safe to do so.

Methods for cleaning up : Dispose of this material and its container in accordance with local regulations.

6.4. Reference to other sections

See also Sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not handle until all safety precautions have been read and understood. Avoid breathing gas. Use only with adequate ventilation. Be aware of any signs of dizziness or fatigue; exposures to fatal concentrations of this product could occur without any significant warning symptoms, due to oxygen deficiency.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.

Storage conditions : Do not expose to temperatures exceeding 50°C (120°F). Keep container closed when not in use. Protect cylinder from physical damage.

Incompatible products known : None

Incompatible materials known : None

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

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Appropriate engineering controls	: No special respiratory protection is required under normal circumstances of use. Use supplied air respiratory protection if oxygen levels are below 19.5% or unknown during emergency response to a release of multiple containers of this product. If respirator protection is needed, use only protection authorized in the U.S. Federal OSHA Standard (29 CFR 1910.134), applicable U. S. State regulations, or the Canadian CSA Standard Z94.4-93 and applicable standards of Canadian Provinces. Oxygen levels below 19.5% are considered IDLH by OSHA.
Hand protection	: No special hand protection is required under normal circumstances of use.
Eye protection	: Wear safety glasses with side shields. 29 CFR 1910.133: Eye and Face Protection.
Skin and body protection	: No special protection is required under normal circumstances of use.
Respiratory protection	: No special respiratory protection is required under normal circumstances of use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Characteristic	Result
Appearance	Colorless gas
Auto-ignition temperature	Not applicable
Boiling point	-185.9°C
Color	Colorless
Critical pressure	4898 kPa
Critical temperature	-122.4°C
Decomposition temperature	No data available
Density	Vapor density 0.103 lb/ft ³ at 21.1°C (70°F)
Explosive properties	Not applicable
Flammability (solid, gas)	Not flammable
Flash point	No data available
Freezing point	No data available
Log Kow	Not applicable
Log Pow	Not applicable
Melting point	-189°C
Molecular mass	40g/mol
Odor	No odor warning properties
Odor threshold	No data available
Oxidizing properties	None
pH	Not applicable
pH solution	No data available
Physical state	Gas
Relative density	No data available
Relative density of saturated gas/air mixture	No data available
Relative evaporation rate (butylacetate=1)	No data available
Relative evaporation rate (ether=1)	Not applicable

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Relative gas density	1.38 (21 °C, vs air)
Relative vapor density at 20°C	0.0016 (≥21.1)
Solubility	Water: 62 mg/L
Vapor pressure	Not applicable

9.2. Other information

Additional information : Product packaged as a 49 CFR 173.306 Limited Quantity

SECTION 10: Stability and reactivity

10.1. Reactivity

None known. Inert gas.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

None known. Argon is an inert gas.

10.6. Hazardous decomposition products

Under normal conditions of storage and use hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Argon (7440-37-1)	
LC50 inhalation rat (ppm)	820000 ppm/4h

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Symptoms/injuries after inhalation	: May displace oxygen and cause rapid suffocation. If you feel unwell, seek medical advice.
Symptoms/injuries after skin contact	: Adverse effects not expected from this product.
Symptoms/injuries after eye contact	: Adverse effects not expected from this product.
Symptoms/injuries after ingestion	: Ingestion is not considered a potential route of exposure.
Symptoms/injuries upon intravenous administration	: Not known.
Chronic symptoms	: None known.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available. Argon is naturally occurring and is the third most common gas in nature.

12.2. Persistence and degradability

No ecological damage caused by this product.

12.3. Bioaccumulative potential

Log Pow Not applicable
Log Kow Not applicable
Bioaccumulative potential No ecological damage caused by this product.

12.4. Mobility in soil

Log Pow Not applicable
Log Kow Not applicable
Ecology – soil No ecological damage caused by this product.

12.5. Other adverse effects

Effect on the ozone layer None
Effect on global warming None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Contact supplier if guidance is required. Do not discharge into any place where its accumulation could be dangerous.
Additional information : None.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT
Transport document description : UN1006 Argon, compressed (Argon), 2.2, Limited Quantity
UN-No.(DOT) : UN1006
Proper Shipping Name (DOT) : Argon, compressed
Transport hazard class(es) (DOT) : 2.2 - Class 2.2 - Non-flammable Non-hazardous Limited Quantity per 49 CFR 173.306
Limited Quantity requirements : 49 CFR 173.306, Limited Quantities of Compressed Gases, per 173.306 a(3) and 49CFR173.306.a(3)i and 49CFR173.306.a(3)ii. Bloxygen is packaged in a metal aerosol container, a gas for which exceptions are noted in 172.101, conforming to requirements of 173.27, less than 30 kg gross weight, in a DOT 2Q container and at or below 160 psig at 70°F.
DOT Packaging Non Bulk (49 CFR 173.xxx) : 302
DOT Packaging Bulk (49 CFR 173.xxx) : 314; 315
DOT Packaging Exceptions (49 CFR 173.xxx) : 306; 307
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 75 kg
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 150 kg
DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
Other information : No supplementary information available.
Labeling : Limited Quantity per 49CFR173.306(a)3



TDG

No additional information available

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Transport by sea

UN-No. (IMDG) : 1006
Proper Shipping Name (IMDG) : ARGON, COMPRESSED
Class (IMDG) : 2.2 - Non-flammable, non-toxic gases
Packing Instruction : P200
Label : 2.2 (Non-Flammable Gas)



Packing Instructions : Emergency Schedule (EMS) Fire = F-C, Spillage = S-V.

IATA

UN-No. (IATA) : 1006
Proper Shipping Name (IATA) : ARGON, COMPRESSED
Class (IATA) : 2
Packing Instructions : P200. Passenger aircraft quantity limitation: 75 kg, Cargo aircraft limitation: 150 kg.
Labeling : Limited Quantity per 49CFR173.306(a)3



SECTION 15: Regulatory information

15.1. US Federal regulations

This product is not listed under SARA sections 302/304 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), or TSCA 12(b). This product does not require an OSHA process safety plan. Argon is not on the California Proposition 65 list.

U.S. SARA REPORTING REQUIREMENTS: This gas is not subject to the reporting requirements of Sections 302, 304 and 313 of Title III of the Superfund Amendments and Reauthorization Act., as follows:

U.S. SARA THRESHOLD PLANNING QUANTITY: There are no specific Threshold Planning Quantities for this gas. The default Federal MSDS submission and inventory requirement filing threshold of 10,000 lb (4,540 kg) may apply, per 40 CFR 370.20.

U.S. TSCA INVENTORY STATUS: Argon is listed on the TSCA Inventory.

U.S. CERCLA REPORTABLE QUANTITIES (RQ): Not applicable.

15.2. International regulations

CANADA

Not listed.

Other Regulations

Argon, Compressed, 7440-37-1

US	CA	EU	AU	PH	JP- ENCS	KR- KECI/KECL	KR- TCCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes

15.3. US State regulations

Argon

Safety Data Sheet

Prepared per <https://www.osha.gov/dsg/hazcom/hazcom-appendix-d.html>
Date of issue: 06/23/2023 Supersedes: 2023 Version: 3.0

Alaska - Designated Toxic and Hazardous Substances: Argon.
California - Permissible Exposure Limits for Chemical Contaminants: Argon.
Florida - Substance List: Argon.
Illinois - Toxic Substance List: Argon.
Kansas - Section 302/313 List: No.
Massachusetts - Substance List: Argon.
Michigan - Critical Materials Register: No.
Minnesota - List of Hazardous Substances: Argon.
Missouri - Employer Information/Toxic Substance List: Argon.
New Jersey - Right to Know Hazardous Substance List: Argon.
North Dakota - List of Hazardous Chemicals, Reportable Quantities: No.
Pennsylvania - Hazardous Substance List: Argon.
Rhode Island - Hazardous Substance List: Argon.
Texas - Hazardous Substance List: No.
West Virginia - Hazardous Substance List: No.
Wisconsin - Toxic and Hazardous Substances: No.

SECTION 16: Other information

Indication of changes : Revised safety data sheet in accordance with OSHA final rule on GHS implementation promulgated March 26, 2012.

Other information : This Safety Data Sheet is offered pursuant to OSHA's Hazard Communication Standard, 29 CFR, 1910.1200. Other government regulations must be reviewed for applicability to this product.

Full text of H-phrases:

Compressed gas	Gases under pressure Compressed gas
H280	Contains gas under pressure; may explode if heated

SDS US (GHS HazCom 2012)

This Safety Data Sheet is offered pursuant to OSHA's Hazard Communication Standard, 29 CFR, 1910.1200. Other government regulations must be reviewed for applicability to this product. To the best of IronWood Design's knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness are not guaranteed and no warranties of any type, either express or implied, are provided. The information contained herein relates only to this specific product. If this product is combined with other materials, all component properties must be considered. Data may be changed from time to time. Be sure to consult the latest edition.