A to Z
How our products find their way into your life
tell me more
You use our products every day. You just don’t realize it. That’s because our products go into the products you use, not onto the shelves at your supermarket or in the mall near your home. To make our point, we’ve put together examples for every letter in the alphabet. These show how some well-known products, including many of the consumer products you buy, use our products in them. We make these products better, and in some cases we make them possible. So, without your even knowing it, we touch your life.
Antifreeze
Oxygen was our very first product and still has hundreds of important uses today, including the synthesis of ethylene glycol, a component of antifreeze, coolants, and deicers for your car.

Apples
Nitrogen has applications in many industries and thousands of products, including lots of uses for foods. One is for the storage of apples. Nitrogen from our membrane systems helps keep apples from spoiling.

Automobiles
Air Products contributes dozens of products used in cars. But you don’t have to look any further than the exterior to see the big role we play. Our oxygen is vital to making the steel for the bodies, and our gases are used in metals processing to treat many of the parts used in the engine and other areas of the car that enable you to drive safely around town.

Balloons
What’s a party without balloons? We help you celebrate with our helium and helium packaging products. Air Products has long been the world’s largest producer of helium. And in the U.K., we help get it to the celebration with Balloonium® cylinders helium packages.

Beer
Nothing is more dispiriting to true beer aficionados than a flat brew. Not to worry. Our dedicated folks have devised nitrogen systems for taverns and little bean-size doodads that go into beer cans, both of which preserve the all-important fizz in beer.
Chicken
From chicken wings to chicken curry, poultry has become a mainstay of global cuisine. For your enjoyment, our Freshline® liquid nitrogen freezing systems allow processors to freeze chicken to lock in freshness and flavor.

Cinnamon (ground)
Our PolarFit® solutions uses the cooling power of liquid nitrogen to remove heat produced in the grinding process by controlling the temperature of your product; preserving flavor and producing ultra-fine spice particles.

Clean Air
We provide technologies that enable CO₂ capture, purification and compression. Building new plants with this technology or retrofitting the large installed base of existing coal-fired assets could significantly reduce CO₂ emissions in the atmosphere, resulting in cleaner air.

Desserts
Our Freshline® food grade gases will help extend the shelf life of dessert products, improving quality and minimizing waste.
Energy
Energy is a significant end market for our products and technologies, and we continue to develop clean energy solutions, including hydrogen for refining and petrochemical processes, and as a fuel; LNG technology for natural gas as an alternative fuel; bioenergy processes; and gases and materials for alternative power, among others.

Fiber Optics
Our helium gas is used in cooling of fiber-optic cable and nuclear reactors, enabling heat and thermal conductivity.

Fluorescent Lamps
The most common gas used in fluorescent lighting is a 50-50 mixture of argon and krypton, two of our products. And no, they have nothing to do with the Man of Steel.

Gasoline
And the fuel that uses the largest volume of our products is gasoline. Refiners use huge quantities of our hydrogen to reduce sulfur emissions.

Glass
Our oxygen helps melt glass in a way that saves energy, reduces emissions, and improves quality. Our nitrogen and hydrogen are used in the forming process to make flat glass for windows, furniture, and cars. And our inert gases improve the insulating properties of windows.
Hyperbaric Healing
It takes more than iodine and bandages to treat a wound these days. It takes our medical oxygen, which is used in hyperbaric therapy for healing wounds.

Ice Cream
Our Freshline® liquid nitrogen freezing systems help ice cream companies freeze all sorts of sweet treats like ice cream sandwiches and ice cream cones.

Incandescent Lamps
Oxygen produced from our vacuum swing adsorption equipment is used in furnaces to make the bulbs. A mixture of mostly argon and nitrogen inside the bulb helps the electrical energy pass through the filament. And who do you think makes the argon and nitrogen? Correct!

Jet Aviation
Engine and landing gear critical components are subject to various thermal spray processes which use oxygen, hydrogen, argon, or helium to apply powder metal coatings for thermal wear or corrosion protection. This process helps improve performance and reliability. Our patented liquid nitrogen cooling technology is used to improve the efficiency of the spraying process. And who doesn’t want their jetliners to perform reliably?
K

Kale
Whether you’re juicing, baking, or incorporating your kale into a main dish or salad, you want it to be fresh. Some vegetables, like kale, begin to show signs of deterioration long before most other foods. When properly cleaned, chilled and placed in suitable packaging, the shelf life of some fresh produce can be significantly extended with our MAP gases.

L

Lettuce
Our MAP gases keep vegetables like lettuce freshly packaged in the ready-to-eat bags we rely on to get dinner on the table … quickly!

M

MRI
This high-tech diagnostic tool, whose full name is magnetic resonance imaging, depends on our helium and nitrogen to keep the electromagnet at super-low temperatures to speed those little electrons around and produce the images. The pictures of health.

Mercury Vapor Lamps
Illuminating streets at night has long been the job of these lamps. Many use argon as a current conductor that starts the electric discharge by electrons and mercury vapor ions.

N

Natural Gas
Our technology and giant heat exchangers have been used to produce most of the liquefied natural gas (LNG) made in the world over the past four decades.
O

O-rings
They have to be smooth and trim to fit right and do their job. And they get that way when those little extra leftover pieces, known as flashing, are removed with our liquid nitrogen systems.

Oranges
We help to improve the preservation of oranges and other fresh fruit with our MAP gases, a very effective way to inhibit spoilage.

P

Paper
This business too has our products all through it. We make the oxygen for pulp bleaching, black liquor oxidation, limekiln enrichment, and wastewater treatment. You may not know what all that means, but trust us, it’s important.

Potato Chips
Nothing makes a sandwich or a picnic complete like a big handful of potato chips. In addition to protecting product flavor, freshness, and extending shelf life, our Freshline® nitrogen protects the packaging of delicate foods, like tasty potato chips, from damage during transport.

Q

Quartz Glass
No, not glass that holds a couple of pints, but a very pure glass most often made with silica, fused with the help of hydrogen and oxygen. Our hydrogen and oxygen.

Quiche
Another application for our liquid nitrogen quick-freezing technology.
Respiration
We offer a family of products and services that hospitals use to treat people afflicted with pulmonary diseases. These products include oxygen mixtures and inhalable medication.

Rockets
The space shuttle program has ended, but we will continue to supply gases like hydrogen and helium for the next generation of space exploration. Our impact is literally out of this world.

Steel
Our first market and still important. Steelmakers use our oxygen in their furnaces to produce more and better steel, faster. They use our argon to make stainless steel. And heat treaters use our hydrogen and nitrogen to give the steel the right strength and other properties.

Textiles
We offer nitrogen and oxygen assist gas systems for precise, high laser cutting speeds in the textile manufacturing industry.

Tires
Our high-purity, high-pressure nitrogen is used to cure the rubber when tires are manufactured.
U

Underwater Exploration
Divers use our helium and other breathing gases to minimize breathing resistance and lower decompression risks.

Uranium Fuel Pellets
Our hydrogen, helium, argon, and nitrogen are used to make uranium fuel pellets, the key component of nuclear fuel assembly bundles.

V

Vegetable Oil
Our hydrogen gas is used in the hydrogenation process to change a liquid vegetable oil into a hard spread/margarine. This process stabilizes the oil and prevents spoilage from oxidation.

Ventilators
To assist hospital patients with breathing, we make medical oxygen used in ventilators.

W

Water
Our Halia® Water Solutions provide treatment which improves water quality of both wastewater and drinking water, for industrial and municipal customers.

Welding
Our gases—argon, helium, nitrogen, and hydrogen, among others—and our Integra® cylinders are essential tools for state-of-the-art cutting and welding.

Wine
Nitrogen is helpful for both the fermentation and the packaging of wine. Cin cin!
X

X-rays
We make the specialty gas Xenon to enhance imaging in X-rays and CAT scans. It is also effective as a neuroprotectant and is used in anesthesia for many types of surgery. Air Products is a fully integrated supplier in the medical industry.

Xerography
The lasers used in xerographic scanning and printing use our helium, gallium arsenide, arsine, and nitrogen.

Y

Yams
Whether you fry or bake them, we help to improve preservation and inhibit spoilage of yams with our MAP gases.

Z

Zinc
One of the biggest uses of zinc is in making protective coatings for steel. We make nitrogen gas to provide an oxygen-free atmosphere for zinc smelting, and liquid nitrogen to help deflash zinc die castings.

Ziti
To get this special shape of pasta frozen and coated with sauce, our ever-helpful liquid nitrogen tumbler freezer comes in handy.
For more information, please contact us at:

Corporate Headquarters
Air Products and Chemicals, Inc.
7201 Hamilton Boulevard
Allentown, PA 18195-1501
T 610-481-4911
F 610-481-5900
info@airproducts.com