

## For More Information

Would you like to know more? We have more to tell. Please contact us or visit the Web site below for more information.

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## 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.

## Nasal Spray

We're a leading producer of fluorine compounds, which help make nasal sprays more potent.



## 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.

## Office Furniture

How do they keep the coatings on furniture looking so good, with none of those bubbles or pinholes? With our Surfynol and D̄ynol surfactants, of course.

## O-rings

They've got 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.

## Paint

We've contributed to the paints and coatings industry in a big way for a long time. One example: our Surfynol and Carbowet® surfactants improve the overall performance of paint, like its scrubability.

## 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.

## Pharmaceuticals

We're pretty active here too. For example, specialty amines for antibiotics, nitrogen for purging and packaging, and fluorinating agents for discovering more pharmaceuticals.

## Photovoltaics

These handy-dandy little things turn sunlight into energy. We provide nitrogen, hydrogen, silane, nitrogen trifluoride, germanium tetrahydride, sulfur hexafluoride, and other things even harder to pronounce.

## 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. In this case, it's the eggs and batter that are frozen.

## Respiration

We offer a family of products and services that hospitals and care providers use to treat people afflicted with pulmonary diseases. These products include oxygen mixtures and inhalable medication.



## Rockets

Our hydrogen has fueled NASA rockets and space shuttles for over 40 years. Our impact is, literally, out of this world.

## Rubber Gloves

You can't protect your hands if there are holes in those gloves. So manufacturers use our Surfynol surfactants to prevent defects that can cause things like holes.

## Shoes

We're good for your sole. Both of them. We make Dabco catalysts, used in polyurethane shoe soles, and liquid nitrogen to deflash rubber soles.

## Sleep

The lack of restorative sleep can have a major impact on your health. We offer a full range of healthcare products to treat all forms of sleep apnea.

## 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.

## Televisions

Our oxygen and specialty materials play an important role in the manufacture of plasma (flat-screen) displays.

## Tires

Our products are in the entire life cycle of tires: amines to cure the rubber, UltraFill® high-purity nitrogen system to inflate tires, and cryogenic grinding to recycle them.

## Underwater Exploration

Divers use our helium and other breathing gases to minimize breathing resistance and lower decompression risks. So you don't get spaced out in inner space.

## Uranium Fuel Pellets

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

## Ventilators

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



## VOC Removal

VOCs are volatile organic compounds. They sure sound bad, don't they? And they are. That's why we make additives for water-based systems that reduce VOCs in products like paints and offer a cryogenic solvent recovery process to reduce, condense, and capture VOCs.



## 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!

## Wrapping Paper

We make materials, like Surfynol surfactants and ZetaSpense® dispersing additives, that make the inks brighter on wrapping paper and allow better overall print quality.

## Xerography

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

## Yogurt

They've been making this milk product for thousands of years but freezing it for only a few. They didn't have our liquid nitrogen freezing back in the day. But they have it now, and it keeps the yogurt fresh much longer than they can in the Caucasus.

## Zero Gravity

Another helium application. NASA used our helium and BIP® cylinders in its gyroscopes in orbit 400 miles above the earth to test Einstein's theory of relativity.

## Zinc

Nitrogen gas provides an oxygen-free atmosphere for zinc smelting. And liquid nitrogen helps deflash zinc die castings.

## Ziti

To get this special shape of pasta coated with sauce, our ever-helpful liquid nitrogen tumbler comes in handy.

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### 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, now our largest-selling product, has applications in many industries and thousands of products. One is for the storage of apples. Nitrogen from our membrane systems keeps apples from spoiling.

### Automobiles

Air Products contributes dozens of products to 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 Surfynol® and Dynol® surfactants go into the coatings for the glossy finish.

### 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 Party Perfect® balloon helium packages.

### Batteries

You won't get very far these days without batteries. But long-lasting batteries remain a challenge, especially for high-power applications like the next generation of power tools and hybrid vehicles. Air Products is working on it. We're developing electrolyte salts that will help enable safer, large-scale lithium batteries which will provide long-lasting power under the most demanding conditions.

### 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.



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.

### Cleaning Agents

We like to keep it clean, so we make Tomadol® surfactants for institutional and industrial hard surface cleaners.

### Computers

We make a long list of products—atmospheric gases, fluorinated compounds, specialty chemicals, and formulations—that are used in the deposition, etching, polishing, and cleaning of transistors, insulators, and metals. These are all required to fabricate semiconductor devices that make up the memory and microprocessor circuits in computers.



### Display Screens

Some of the same gases and chemicals used in making computer chips are also used in the fabrication of flat liquid crystal displays (LCDs) found on laptop computers and flat televisions. Newer display technologies make use of our polymer products that we've developed for electronic paper and organic light-emitting diode (OLED) display screens used in phones, automobiles, and other electronic devices.

### Eggs

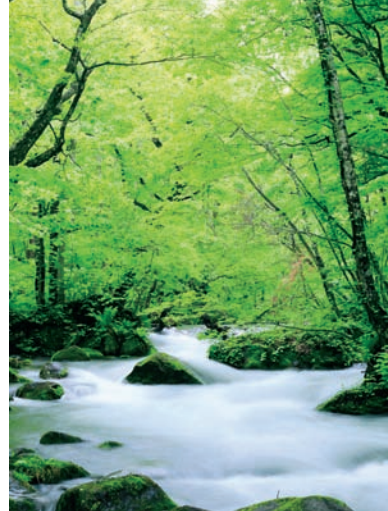
Which came first, the chicken or the freezing system? Okay, the chicken wins. But our liquid nitrogen freezing systems make it easier to eat a lot of prepared or perishable foods. Scrambled eggs, for example. You don't have to break all those shells.

### Electric Power

We provide large volumes of oxygen to make coal and other solids into a gas, which is then used to produce clean electric power.

### Environment

Many of our products and technologies benefit the environment. Our oxy-fuel systems help industrial companies produce the flame for various applications more efficiently, thus causing less pollution. Also, our Oxy-Dep® application treats wastewater more effectively and completely.



### 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.

### Foam

The polyurethane kind, that is. Our Dabco® catalysts and surfactants show up in flexible, rigid, and micro-cellular foam, which keep you comfortable (in cars and chairs) and warm (with insulating materials).

### Fuel

The growing need for energy—traditional and cutting edge—creates a growing need for our products. Our oxygen is used in the production of synthetic diesel fuel. Our hydrogen is required for the generation of power in clean-energy cars that use fuel cells.

### Gasoline

And the fuel that uses the largest volume of our products is good, old-fashioned 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.

### Golf Balls

Those dimpled little projectiles have to look good and fly true. So manufacturers use our Surfynol and Dynol surfactants to get that high-gloss finish and our liquid nitrogen systems to freeze the centers, which prevents deforming during production.

### Gypsum

We use flue gas desulfurization to remove 95 percent of the SO2 emissions at our coal-fired power plant in Indiana. And then what do we do with it? We send it to be made into gypsum, which is used to make wallboard. Cuts pollution, reduces waste, makes a useful product. A trifecta.

### Hair Care

We make Intelimer® polymers. And they make people's lives easier, with products that allow reversible styling and restyling of hair with humidity resistance and curl retention. No more bad hair days.

### Hyperbaric Healing

It takes more than iodine and bandages to treat a wound these days. It takes our oxygen, which is used in hyperbaric therapy for healing wounds.

### Ice Cream

Our liquid nitrogen system helps ice cream companies make uniquely shaped ice cream novelties.



### Ink

Flexographic newspaper ink, the kind used to bring your colorful Sunday comics to life, has our Surfynol surfactants in it.

### 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!

### Jams and Jellies

Our modified atmosphere packaging (MAP) helps to preserve the preserves and keep these sweet treats fresh and flavorful.

### Jet Engines

We have a high-velocity oxy-fuel technology that uses oxygen and a fuel to heat the substrate and spray a powder material to create wear resistance. And who doesn't want their plane to resist wear?

### Kitchen Cabinets

Surfynol surfactants from Air Products contribute to the appearance of the wood coating on the cabinets.



### Kosher Vegetables

Our modified atmosphere packaging (MAP) also helps keep kosher products fresh to meet their high dietary standards.

### LEDs

Or light-emitting diodes, if you prefer, and LCDs, also known as liquid crystal displays, both use our specialty materials to make their magic.

### Locomotion

No, not choo-choo trains, but wheelchairs, walkers, and canes to help people with physical limitations move about.

### Lotions

Our Intelimer custom-engineered polymers thicken and texturize skin lotions and improve their mixability.

### 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.

