

oci

OCI CHEMICAL CORPORATION

GREAT PEOPLE | GREAT PRODUCTS | PERFECT CHEMISTRY

The image features a vibrant red background with a large green triangular shape on the right side. The OCÍ logo is centered in the green area. The background is filled with various technical and digital motifs, including a grid, a car wheel, and abstract line patterns. On the left side, there is a vertical list of text elements, some of which are mirrored or repeated. The overall aesthetic is modern and high-tech.

OCÍ



A GLOBAL LEADER

OCI Chemical is a subsidiary of OCI Company Ltd., a leading chemical manufacturer and publicly traded company on the Korean Exchange. OCI Company has five primary business divisions: renewable energy, inorganic chemicals, petro and coal chemicals, fine chemicals and insulation. OCI Chemical is an integral part of the inorganic chemicals division and a major contributor to this division's sales and profits.

Since 1962, OCI Chemical's plant in Green River, Wyoming has been providing high quality soda ash to companies across North America and around the globe. While we are still among the world's largest producers of soda ash, OCI Chemical has also become a leading producer of sodium percarbonate (PC) and hydrogen peroxide.



OCI Chemical is committed to excellence and safety in all aspects of business. Every OCI employee, from the plants in Green River, Decatur and Columbus to our corporate headquarters in Atlanta, is empowered to modify any operation that poses a potential threat to themselves, their fellow workers, the surrounding community or the environment. Our customers know they can count on us for more than just quality chemicals. They know OCI was built on strong values, strong character and a passion for excellence. We know that great people and great products equal perfect chemistry.



OCI Wyoming, L.P. Green River, Wyoming Soda Ash Mining and Production



OCI Alabama LLC Decatur, Alabama Sodium Percarbonate Production



EkO Peroxide LLC Columbus, Mississippi Hydrogen Peroxide Production

OCI PLANT LOCATIONS

OCI CHEMICAL THROUGH THE YEARS

1962

Stauffer Chemical opens Big Island Mine and Refinery in Green River, WY and produces soda ash from the mined trona.

1985

Chesebrough Ponds acquires Stauffer Chemical.

1986

Imperial Chemical Industries (ICI) buys Stauffer Chemical from Chesebrough Ponds, which had been taken over by Unilever.

1987

ICI sells Stauffer's industrial chemicals section (soda ash business) to Rhône Poulenc.

1996

Rhône Poulenc sells its interest in soda ash to OCI Company, Ltd. The new North American subsidiary is named OCI Chemical.

2001

OCI Chemical starts up new sodium percarbonate plant in Decatur, AL.

2006

OCI and Eka Chemicals Inc. form a joint venture, EkO, to produce and sell hydrogen peroxide in Columbus, MS.

OCI Wyoming's Big Island Mine and Refinery is a four-time winner of the US Department of Labor Sentinels of Safety award for being the country's safest underground mine. Our mine and surface rescue teams are consistently among the best in the country, with five national mine rescue and two international surface rescue championships. OCI's awards include:

- Industrial Minerals Association – North America (IMA-NA) – 2009 & 2010 First Place Winner, Large Mine Category – Best RAIR
- Wyoming State Mine Inspectors Safety Excellence Award – First Place Winner 25 Times.
- National Safety Council Metal/Non-Metal Mining Safety Award – First Place Winner 6 Times (Non-Coal Underground Division)
- Safety Olympiad Champions (Surface Mine Rescue Champions) – 1997, 1998, 2001, 2008, 2010
- National Mine Rescue Champions (Metal/Non-Metal) – 1975, 1982, 1986, 1992, 1996, 2000, 2004
- International Champions (Surface Mine Rescue Champions) – 1994, 1995, 2003

OCI's sodium percarbonate plant in Decatur, AL has been recognized by the National Safety Council, Manufacture Alabama and the Alabama Department of Industrial Relations for its stellar safety record. OCI's awards include:

- One (1) Million Safe Man Hours without a Lost Time Accident – 2010
- National Safety Council Industry Leader Award (4 time winner)
- National Safety Council Safety Leadership Award (9 consecutive years)
- Alabama Department of Industrial Relations Workplace Safety Award of Superior Achievement (9 consecutive years)
- National Safety Council Perfect Record Award (9 consecutive years)
- Alabama Department of Industrial Relations Drug Free Workplace Certification
- United Way Gold, Silver, and Bronze awards

IMA-NA
Industrial Minerals Association - North America
Safety Achievement Award

OCI Wyoming L.P.

2010 Best Company Safety Record

Large Company Category



- 5,851,420 — Process for manufacturing granular sodium percarbonate
- 6,218,352 — Composite composition comprising sodium percarbonate with improved solubility
- 6,465,408 — Granular coated sodium percarbonate for detergent
- 6,641,866 — Process for manufacturing granular coated sodium percarbonate for detergent
- 6,990,908 — Transportation subassembly for materials destabilized in presence of destabilizing contaminants
- 7,709,437 — Cogranulates of bleach and activators

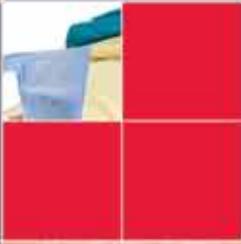
Soda ash, known chemically as sodium carbonate (Na_2CO_3), has been in use for thousands of years. Soda ash occurs in many kinds of mineral waters and in mineral deposits of certain springs and lake brines. The richest and most commonly found source of soda ash is trona, a mix of sodium carbonate, sodium bicarbonate and water. Although trona can be found in many places, the world's purest, largest and most accessible deposit is in Wyoming's Green River Basin.

At OCI Wyoming's 3.25 million short ton facility, trona is mined using the "Room and Pillar Method" and conveyed to the surface to be refined into dense soda ash. Quality control is maintained through detailed instrumentation, laboratory testing and rigid supervision. Our extensive industry experience, knowledgeable staff, modern laboratories, ISO 9001 (2008 Standard) certification and highly efficient processing facilities combine to provide OCI customers with superior service and support.

Soda ash is used in a variety of industries and applications including:

- Glass Manufacturing
- Dry Powder Detergents (i.e. laundry, auto dish, etc.)
- Pulp Processing
- pH Control
- Specialty Chemicals Manufacturing (i.e. phosphates, chromium, etc.)
- Food Manufacturing (i.e. yeast, baking soda, etc.)





More information about OCI's Provox® products and their applications can be found in our Provox® brochure.

SODIUM PERCARBONATE



In 2001, OCI Chemical began manufacturing a highly effective oxygen-based bleach called sodium percarbonate (PC, or sodium carbonate peroxyhydrate) in Decatur, Alabama. Today, this state of the art facility can produce 64,000 metric tons of sodium percarbonate. This product, named Provox® for its ability to provide oxygen, is formed by adding the active ingredient hydrogen peroxide to a granular solid base of sodium carbonate (soda ash). Provox can be used as a bleach or oxidizer for the many applications which require or prefer product in powder or tablet format.

Research leading to the development of PC dates back to the 1960's when European laundry detergent manufacturers and formulators sought to identify a safer, less harsh bleach component for their products that was more environmentally friendly than the standard chlorine based bleaching ingredients available at the time. Sodium perborate, a precursor to PC, was developed in the 1970's and 1980's, but health concerns regarding human exposure to boron (a main ingredient in sodium perborate) drove preference to the safer, less hazardous oxygen bleach, sodium percarbonate. Since the 1990's, powder oxidizer products have rapidly transitioned from both chlorine and perborate to percarbonate worldwide. Use of this bleaching ingredient has continued from its roots in Europe to North America and is now being used in Asia. Its use is also widely seen in the developing areas of South America, the Middle East and Africa.

Provox® is a registered trademark of OCI Chemical Corporation.

HYDROGEN PEROXIDE

In November 2006, OCI Chemical Corporation and Eka Chemicals Inc. entered into a joint venture to manufacture and sell hydrogen peroxide, forming EkO Peroxide LLC. The new company owns and administers Eka's existing 70,000 short ton hydrogen peroxide production plant in Columbus, MS, utilizing the existing, knowledgeable manpower for manufacturing, logistics and distribution of the product.

Hydrogen peroxide is manufactured from oxygen and hydrogen in a closed process. The material is then purified, concentrated and stabilized. Hydrogen peroxide is commercially supplied as an aqueous solution in concentrations of 35%, 50% and 70% by weight.

Hydrogen peroxide is a powerful yet easy to handle oxidizing agent. Despite its power, peroxide is a natural metabolite of many organisms and has none of the problems of gaseous release or chemical residues that are associated with other chemical oxidants. When the job is done, it decomposes into ordinary water and oxygen.

Hydrogen peroxide has long been used for bleaching mechanical pulp and de-inking waste paper. With the patented Lignox method developed by Eka Chemicals, hydrogen peroxide can remove much of the lignin from the pulp and is today the basis of TCF bleaching.

In addition to bleaching pulp and paper, peroxide is used for bleaching textiles, pollution control and for the manufacturing or processing of foods, minerals, petrochemicals and consumer products (detergents).





LOOKING INTO A GREENER FUTURE

OCI understands how important the environment is to our customers. We take pride in the fact that all of our products are made from naturally occurring ingredients.

Soda ash is a mineral mined from the ground and refined with no additional chemicals added to the product. Our product is pure and safe enough to be added to food products consumed every day.

Hydrogen peroxide is made up of the basic elements of oxygen and hydrogen and it biodegrades into pure oxygen and water.

Sodium percarbonate (PC) is composed of soda ash and hydrogen peroxide. The biodegradability of PC is rapid and it is broken down into the following components: oxygen, water and soda ash. PC's effectiveness coupled with its rapid decomposition into non-toxic substances make it the ideal way to clean with minimal effects on the surrounding environment.

Our products are effective and more environmentally friendly than other chemicals that could be used in their place. OCI is committed to working towards producing innovative, reliable and safe products for the future.

RECYCLE | REFINE | REUSE

The natural soda ash industry in the Green River basin uses evaporative crystallizer technology. Similar to all evaporative systems, a concentrated aqueous solution is introduced to maintain the purity and quality of the refined soda ash product. The run-off of this stream (a mixture of soda ash and water) is contained in holding ponds throughout the facility. OCI has developed a unique solution to reduce the capacity of these ponds and recover the useable soda ash, effectively recovering waste while improving efficiencies. The purified soda ash crystals, chemically sodium carbonate decahydrate, is harvested from the ponds seasonally and introduced as an additional feedstock to compliment the mining of trona ore to produce soda ash at the facility.

500 mL
± 5%



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