

Chlorine Chemistry

American Chemistry Council

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Industry Fact Sheet

The chlor-alkali industry applies the energy of electricity to the "salt of the earth" to produce three of the most useful chemical building blocks: chlorine, sodium hydroxide and hydrogen.



\$630 billion

A recent economic analysis found that using chlorine chemistry in nine end-use applications saves U.S. and Canadian consumers over \$630 billion every year.

critical chemistry

Chlorine chemistry helps manufacture thousands of products critical to health, safety, energy efficiency and innovation.

keystone chemical

Roughly 1/2 of the products of the chemistry industry depend on chlorine chemistry.

safe H₂O

The vast majority of U.S. water systems use chlorine to help provide safe drinking water.

medicine

93% of top-selling U.S. pharmaceuticals are made with chlorine chemistry.

germ-buster

Chlorine disinfectants destroy germs on surfaces in homes, healthcare settings, day care facilities, schools and restaurants.

food

86% of crop protection chemicals are made with chlorine chemistry.

versatile chemistry

Chlorine's co-product, sodium hydroxide (alkali), helps produce soaps and detergents, textiles, pulp and paper, metals and more.

\$8.8 billion

Chlor-alkali industry employees earn a total of more than \$8.8 billion in wages each year.

161 thousand

Chlorine-related industries supply more than 161 thousand U.S. jobs.

energy efficiency

Chlorine-based building and construction products, like polyurethane insulation and vinyl windows, help conserve energy.

wind and solar

Components of wind turbines and solar panels are made with chlorine chemistry.

zero-emission fuel

Hydrogen, a co-product of the chlor-alkali process, can be used as a zero-emission fuel in plant boilers, reducing a facility's carbon footprint.

innovation

Chlorine chemistry helps process ultra-pure silicon for computer electronics and high-speed fiber optic communication.

infrastructure renewal

Durable, corrosion-resistant PVC pipe, a product of chlorine chemistry, is a sustainable solution for water infrastructure renewal.

recycling

Chlorine chemistry helps remove impurities from aluminum cans during recycling, diverting trash from landfills, saving energy and precious resources.

