

THE FACTS ABOUT ETHYLENE OXIDE



What is ethylene oxide?

A versatile chemical building block, ethylene oxide is primarily used in industrial manufacturing operations to make other chemicals. Ethylene oxide and its derivatives help make a variety of products we use every day.



Polyester fibers for upholstery, carpet, pillows, and clothing



Automotive brake fluid, antifreeze, safety glass, seating



Household and industrial cleaners



Pharmaceuticals and ointments



Cosmetics and shampoos



Sterilization of medical devices, bandages, & food



De-icing solutions

Emissions sources are regulated by EPA and OSHA

Sources of ethylene oxide emissions are regulated under U.S. Environmental Protection Agency Maximum Achievable Control Technology (MACT) and Administration Occupational Safety and Health (OSHA) standards.

- Requirements for control devices to reduce emissions
- Facility monitoring, including initial performance tests
- Site-specific operating parameters
- Continuous reporting and recordkeeping requirements
- Establish and implement written compliance program to reduce worker exposures to or below the OSHA limit

Product stewardship and performance



RESPONSIBLE CARE®
OUR COMMITMENT TO SUSTAINABILITY



- ACC member companies participate in Responsible Care®, the chemical manufacturing industry's environmental, health, safety, and security performance initiative. The program includes open and transparent reporting and mandatory audits to certify performance.
- Members of ACC's Ethylene Oxide Panel are committed to product stewardship to promote health, safety, and environmental protection in the design, manufacture, marketing, distribution, use, recycling, and disposal of their products.
- National ethylene oxide emissions for the industrial sector fell by 79 percent from 2002 to 2014. (Source: EPA National Emissions Inventory).

Flawed EPA Science → Overstated Risk

- EPA's 2014 National Air Toxics Assessment (NATA) used a flawed risk value for ethylene oxide that is not based on the best available science. It vastly overstates risk to communities and workers.
- The risk value is far below levels found in nature. It is 19,000 times lower than the naturally-created levels of ethylene oxide in the human body. And it is far lower than the concentrations found in ambient air in states without ethylene oxide production or use.
- The risk value was generated by EPA's Integrated Risk Information System (IRIS) program, which neglected to consider certain comprehensive, highly relevant studies.
- The National Academies, U.S. Government Accountability Office, Congress, and many in the scientific community have found serious, longstanding problems with the IRIS program.
- ACC's Ethylene Oxide Panel has filed a Request for Correction under the Information Quality Act to EO information used in the 2014 NATA.

For more information on EO, please visit www.chemicalsafetyfacts.org