

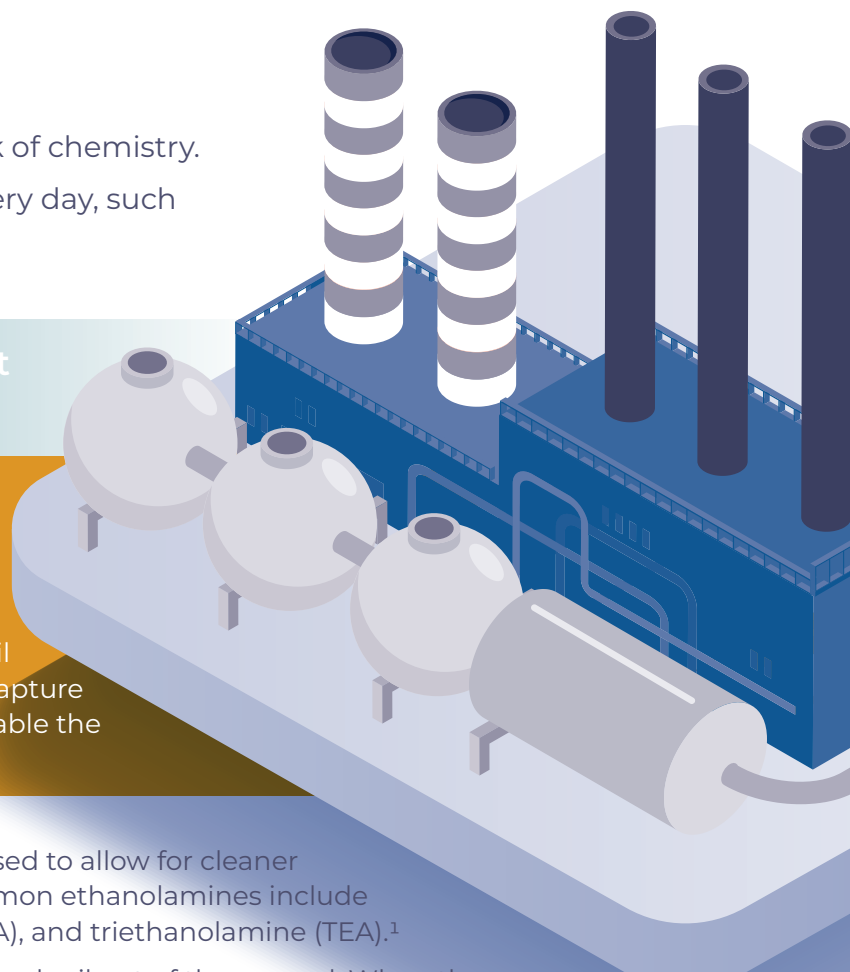
ETHYLENE OXIDE



A Critical Building Block for the Oil and Gas Industry

Ethylene oxide (EO) is a versatile building block of chemistry. It helps make many of the products we use every day, such as plastics, safety glass, adhesives, and textiles.

One use of ethylene oxide is in support for the U.S. oil and gas industry.



How is it used?

Ethylene oxide derivatives are used in natural gas purification to reduce corrosion and scale in oil and gas processing, oil well remediation, enhanced oil recovery aids, gas dehydration, and carbon capture in gas processing, which ultimately helps enable the energy transition.

- ✔ A family of its derivatives -- ethanolamines are used to allow for cleaner burning fuels resulting in less air pollution. Common ethanolamines include monoethanolamine (MEA), diethanolamine (DEA), and triethanolamine (TEA).¹
- ✔ When processing petroleum, water is added to push oil out of the ground. When the water comes up, it is often accompanied by sand and rock. As a petroleum demulsifier, TEA helps separate oil from water and other substances. In gas treating processes for refineries and natural gas streams, MEA and DEA also help to remove contaminants from gasoline.²
- ✔ Many other derivatives of ethylene oxide allow for faster drilling and completion of oil and gas wells. By using ethylene oxide-based compounds, petroleum production speed has increased from the well head to the refinery while reducing corrosion in the pipelines. This helps to lower the overall cost of petroleum products and reduce the frequency of replacing equipment and pipelines.³
- ✔ The demands on our nation's oil and gas sector continue to grow, and overly conservative restrictions on the production and use of ethylene oxide could put the needs of the U.S. oil and gas industry at risk. America is the world's leading producer of oil and natural gas responsible for 12.3 million American jobs.⁴
- ✔ Our member companies are dedicated to the responsible manufacture and use of ethylene oxide, and we support strong, science-based regulation of this important chemistry.

¹ Chemical Safety Facts – [Ethanolamines](#)

² Chemical Safety Facts – [Ethanolamines](#)

³ American Chemical Society – [Chemicals Used in Oil-Field Operations](#)

⁴ Department of Energy – [The Economic Benefits of Oil and Gas](#)

