

# ETHYLENE OXIDE



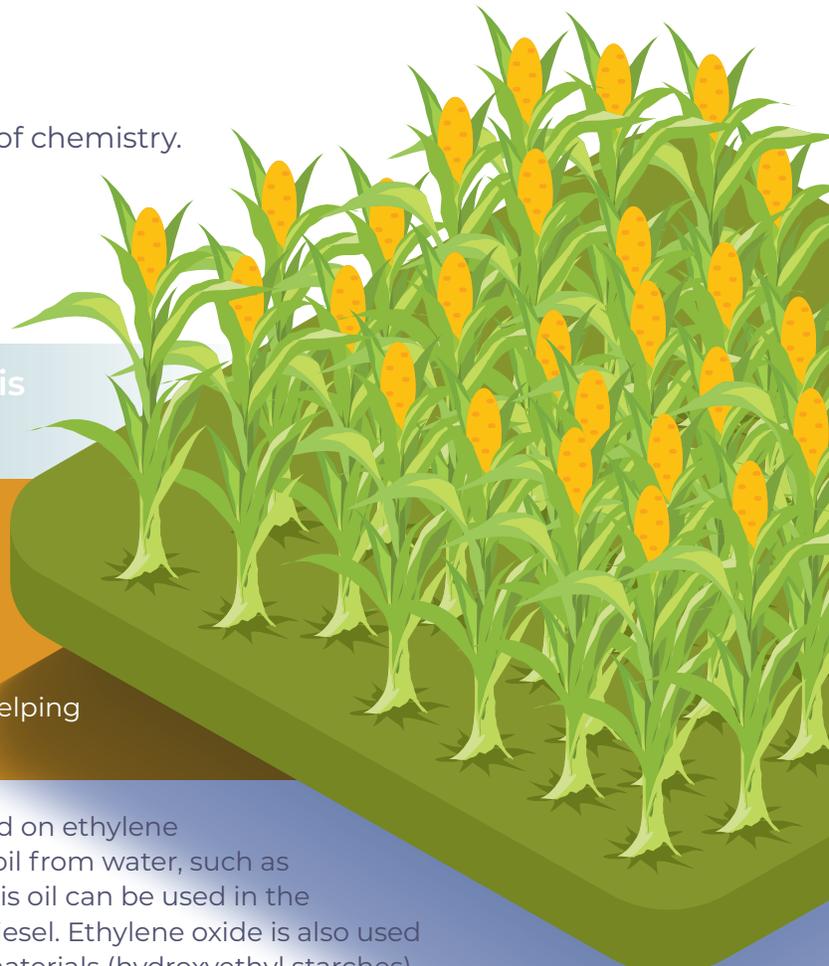
A Critical Building Block

for U.S. Agriculture

Ethylene oxide (EO) is a versatile building block of chemistry.

It helps make many of the products we use every day, such as household cleaners, plastics, safety glass, adhesives, textiles, and detergents.

One area where ethylene oxide is used is in the agriculture industry in the U.S.



## How is it used?

Ethylene oxide and its derivatives are utilized to produce a wide variety of active ingredients, used in insecticides, pesticides, and herbicides. Each active ingredient targets specific needs for the agricultural industry – helping to protect crops and boost crop production.

- ✓ In processing agricultural crops, demulsifiers based on ethylene oxide are employed to improve the separation of oil from water, such as in corn oil extraction in the bioethanol process. This oil can be used in the food chain, animal feed supply, or made into biodiesel. Ethylene oxide is also used to produce industrial starches from agricultural materials (hydroxyethyl starches) which are a versatile input used in many industries, including adhesive and binding applications and paper making (printing and coating). Industrial starch can also be used in laundry starch.<sup>1</sup>
- ✓ Further, in veterinary and animal surgical facilities, ethylene oxide is used to sterilize medical devices, procedure kits, surgical trays, and surgical instruments.
- ✓ As the US continues to grow, so do our nation's food needs. Overly conservative restrictions on the production and use of ethylene oxide could put the needs of the agriculture sector and its derivatives at risk. According to the US Department of Agriculture, agriculture and its related industries account for 10.5 percent of US employment roughly 21.1 million jobs and 5.4 percent of the nation's gross domestic product.<sup>2</sup>
- ✓ 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.

<sup>1</sup> American Chemistry Council Economics & Statistics Department. The Economic Benefits of Ethylene Oxide and the Potential Cost of Deselection. June 2019.

<sup>2</sup> USDA, Economic Research Service. Selected Charts from Ag and Food Statistics: Charting the Essentials. February 2023.

