

**PRODUCT: Ethylene oxide**

**Ethylene oxide**, properly called oxirane by IUPAC, is the organic compound with the formula C<sub>2</sub>H<sub>4</sub>O. It is a cyclic ether. Ethylene oxide is a colorless flammable gas at room temperature, with a faintly sweet odor; it is the simplest epoxide: a three-membered ring consisting of one oxygen atom and two carbon atoms.

**Application:**

Most of the produced ethylene oxide is used as an intermediate in the production of other useful chemicals. A very important derivative is ethylene glycol which is used for the manufacture of polyester fiber for clothes, upholstery, carpet, and pillows and the blending of automotive engine antifreeze.

Items	Unit	Standards
Acetylene	ppm wt	2.8
Ammonia	ppm wt	0.15
C1 + C2	ppm wt	
C3's 4	ppm wt	15
CO	ppm wt	1
CO <sub>2</sub>	ppm wt	4.7
DMF	ppm wt	1
Ethylene		99.9
H <sub>2</sub> O	ppm wt	5
Hydrogen	ppm wt	0.2
MeOH	ppm wt	1
Oxygen	ppm wt	0.6
Total Sulfur	ppm wt	0.1