

ABSTRACT

METHOD FOR PRODUCING ETHYLENE OXIDE

5 According to the present invention, there is provided means for suppressing the occurrence of corrosion on the inner tube side in a heat exchanger and enabling continuous production for a long time period in a process for producing ethylene oxide.

10 An embodiment of the present invention relates to a method for producing ethylene oxide, the method including: supplying a raw material gas including ethylene, molecular oxygen, and a chlorine compound to an ethylene oxidation reactor; subjecting ethylene and molecular oxygen in the raw
15 material gas to catalytic vapor phase oxidation in the ethylene oxidation reactor in the presence of a silver catalyst, and thereby producing a gas including ethylene oxide, water, and a chlorine compound; and cooling a gas to be cooled including water and the chlorine compound using a heat exchanger.
20 According to this method, in the heat exchanger, the gas to be cooled including water to be cooled and a chlorine compound is cooled at a linear gas velocity on the heat exchanger inner tube side of 7 m/s or higher.