

Abstract

The claimed manufacturing method for 1,1,1,3,3-pentafluoropropane comprises the first process, in which 1,1,1-trifluoro-3-chloro-2-propene is obtained by inducing a reaction between 1,1,1,3,3-pentafluoropropane and hydrogen fluoride in the vapor phase, and the second process, in which the 1,1,1,3,3-pentafluoropropane is obtained by inducing a reaction between 1,1,1-trifluoro-3-chloro-2-propene and hydrogen in the vapor phase, and 1,1,1-trifluoro-3-chloro-2-propene obtained in the first process is supplied to the second process after removing the HCl by-products.

This invention can provide a new economic manufacturing method of 1,1,1,3,3-pentafluoropropane with high yield and selectivity.