

Abstract

5 Process for recovering (chloro)hydrocarbon-free hydrogen chloride and
phosgene-free (chloro)hydrocarbons from a hydrogen chloride stream comprising
(chloro)hydrocarbons and phosgene, which comprises

10 i) in a first step, connecting a first adsorber and a second adsorber in series
and passing the fresh hydrogen chloride stream comprising phosgene and
(chloro)hydrocarbons firstly through the first adsorber and subsequently
through the second adsorber until essentially no more (chloro)hydrocarbon
is adsorbed by the first adsorber,

15 ii) in a second step, passing the fresh hydrogen chloride stream through the
second adsorber while the first adsorber is regenerated, with essentially
phosgene-free (chloro)hydrocarbon being obtained in the regeneration,

20 iii) in a third step, passing the fresh hydrogen chloride steam firstly through
the second adsorber and subsequently through the regenerated first
adsorber until essentially no more (chloro)hydrocarbon is adsorbed by the
second adsorber,

25 iv) in a fourth step, passing the fresh hydrogen chloride stream through the
first adsorber while the second adsorber is regenerated, with essentially
phosgene-free (chloro)hydrocarbon being obtained in the regeneration,

30 with the steps i) to iv) being able to be carried out one or more times in
succession.

(Fig. 1)