

Abstract

A process for the preparation of acrylic acid by:

- 5 (a) preparation of a gaseous product mixture which essentially has the composition of a reaction mixture of catalytic gas-phase oxidation of C₃-alkanes, C₃-alkenes, C₃-alkanols and/or C₃-alkanals and/or intermediates thereof to acrylic acid,
which comprises
- 10 (b) condensation of the gaseous product mixture,
- (c) crystallization of the acrylic acid from the solution obtained in stage (b), with partial evaporation of the solution under reduced pressure,
- (d) isolation of the resulting crystals from the mother liquor,
- (e) recycling of at least a part of the mother liquor from stage (d) to stage (b)
- 15 and
- (f) recycling of at least a part of the evaporated solution from stage (c) to stage (b).