

PRODUCTION METHOD OF 1,3-BUTADIENE

ABSTRACT

A production method of 1,3-butadiene which includes the steps of: obtaining a product gas containing 1,3-butadiene by an oxidative dehydrogenation reaction of a raw material gas containing n-butene with a gas containing molecular oxygen in the presence of a metal oxide catalyst; cooling the product gas; and roughly separating the cooled product gas into: a fraction containing the molecular oxygen and an inert gas; and other gas by selective absorption to an absorption solvent, wherein in the product gas, the N_2 concentration is no less than 35% by volume and no greater than 90% by volume, the H_2O concentration is no less than 5% by volume and no greater than 60% by volume, and the 1,3-butadiene concentration is no less than 2% by volume and no greater than 15% by volume, and wherein the absorption solvent contains acetonitrile as a principal component.

[Fig. 1]