

ABSTRACT

Provided are a catalyst for producing a higher silane with high yield at low cost by performing a reaction at relatively low temperature while inhibiting decomposition into solid silicon; and a process using the catalyst for producing a higher silane. The catalyst for producing a higher silane includes a porous oxide and is used to convert a lower silane to a higher silane wherein the porous oxide has at least regularly arranged pores and is primarily composed of silicon oxide, wherein a content of alkali metals and alkali earth metals in the porous oxide is not less than 0.00 wt% and not more than 2.00 wt%.