

## Abstract

The present invention relates to a process for preparing hydrogen cyanide by the Andrussov  
5 process by reacting methane-containing gas, ammonia and oxygen-containing gas over a  
catalyst at elevated temperature, wherein the proportion by volume of oxygen in relation to the  
total volume of nitrogen and oxygen ( $O_2/(O_2 + N_2)$ ) is in the range of 0.2 to 1.0 and the  
reaction is performed with a non-ignitable reactant gas mixture.