

SOL-GEL SYNTHESIS OF VANADIUM PHOSPHOROUS OXIDES FOR THE PARTIAL
OXIDATION OF N-BUTANE TO MALEIC ANHYDRIDE

by

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Summary : Free sol-gel synthesis of vanadium phosphorous oxides for the partial oxidation ofn-butane to maleic anhydride pdf download - in general sol-gel prepared catalysts were significantly more selective than the traditionally prepared materials and it is suggested that the small crystallite size obtained in the precursor influenced the crystallite size of the active phase increasing their selectivity towards maleic anhydride the evaluation of these materials as catalysts for the partial oxidation of n-butane at 673 k under mixtures of 1 5 n-butane in air yielded selectivity of 40 at 50 conversion compared to 25 selectivity at similar level of conversion produced by the traditionally prepared catalysts variations in the catalytic performance are attributed to observed polymorphism in the activated materials which is evidenced by remarkable differences in the intrinsic activity all precursors and catalysts were characterized by ir xrd sem and bet and the products of the catalytic tests were analyzed by gc

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