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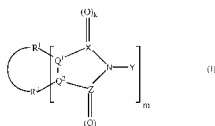
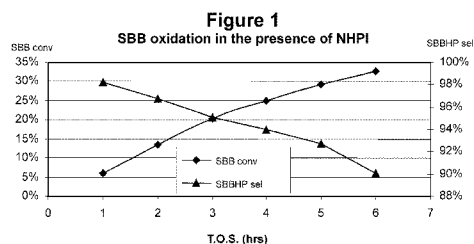
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(54) Title: OXIDATION OF HYDROCARBONS



(57) **Abstract:** In a process for oxidizing a hydrocarbon to a corresponding hydroperoxide, alcohol, ketone, carboxylic acid or dicarboxylic acid, the hydrocarbon is contacted with an oxygen-containing gas in the presence of a catalyst comprising a cyclic imide of the general formula (I); wherein each of R^1 and R^2 is independently selected from hydrocarbyl and substituted hydrocarbyl radicals having 1 to 20 carbon atoms, or from the groups SO_3H , NH_2 , OH and NO_2 , or from the atoms H, F, Cl, Br and I provided that R^1 and R^2 can be linked to one another via a covalent bond; each of Q^1 and Q^2 is independently selected from C, CH, N and CR^3 ; each of X and Z is independently selected from C, S, CH_2 , N, P and elements of Group 4 of the Periodic Table; Y is O or OH; k is 0, 1, or 2; l is 0, 1, or 2; m is 1 to 3, and R^3 can be any of the entities listed for R^1 . The contacting produces an effluent comprising an oxidized hydrocarbon product and unreacted imide catalyst of said formula (I) and the effluent is treated with a solid sorbent to remove at least part of the unreacted imide catalyst and produce a treated effluent comprising said oxidized hydrocarbon product. The organic phase can then be recovered.