

ORIGINAL

ABSTRACT

"OLIGOMERISATION OF OLEFINIC COMPOUNDS WITH REDUCED POLYMER FORMATION"

The invention relates to a process for producing an oligomeric product by oligomerisation of at least one olefinic compound, the process including a) providing an activated oligomerisation catalyst by combining, in any order, i) a source of chromium, ii) a ligating compound of the formula I $(R^1)_m X^1 (Y) X^2 (R^2)_n \dots$ I wherein X^1 and X^2 are independently an atom selected from the group consisting of nitrogen, phosphorus, arsenic, antimony, bismuth, oxygen, sulphur and selenium or said atom oxidized by S, Se, N or O where the valence of X^1 and/or X^2 allows for such oxidation, Y is a linking group between X^1 and X^2 , m and n are independently 0, 1 or a larger integer, and R^1 and R^2 are independently hydrogen, a hydrocarbyl group, an organoheteryl group or a heterohydrocarbyl group, and R^1 being the same or different when $m > 1$, and R^2 being the same or different when $n > 1$, iii) a catalyst activator or combination of catalyst activators, b) providing a zinc compound, and c) contacting the at least one olefinic compound with a composition containing the activated oligomerisation catalyst and the zinc compound, the zinc compound being present in a sufficient quantity such that the ratio of the molar amount of zinc in the zinc compound to the molar amount of chromium in the source of chromium is between 1 and 10000 The invention also provides for a process for activating an oligomerisation catalyst to be used to produce an oligomeric product from at least one olefinic compound, as described above.