

Synthesis of α -olefin dimerization.

Current industrial processes produce linear α -olefins through ethylene oligomerization to yield olefins that are predominantly 4-30 carbon atoms long. The most useful linear α -olefins are 4-16 carbon atoms long and are utilized in the production of plasticizers, household detergents, and synthetic oils. Linear α -olefins with chain lengths longer than 16 carbon atoms are commonly discarded, finding some usage in the production of tar and wax.

When designing our catalyst, the core concept

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References:

1. Broene, R. D.; Brookhart, M.; Lamanna, W. M.; Volpe, A. F.