Mild Methylation Reagent of Carbonyl Compounds
(Petasis Reagent)

Advantages

• Applicable to Various Carbonyl Compounds
• More Air-Stable and Milder Reagent than Tebbe Reagent

Dimethyltitanocene (D4100) is a useful methylation reagent named the Petasis reagent. Mild thermolysis of D4100 (>60 °C) can generate a reactive titanocene methylidene species, which in situ converts a variety of carbonyl compounds, such as aldehydes, ketones, esters, and lactones, to the corresponding olefins. D4100 is more air-stable than the Tebbe reagent, and the reaction proceeds under mild conditions because it does not have the highly acidic aluminum moiety.

Related Product
Tebbe Reagent (ca. 0.5mol/L in Toluene)

Reference