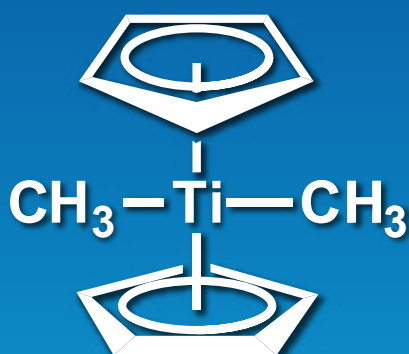


# Mild Methylenation Reagent of Carbonyl Compounds (Petasis Reagent)



[D4100]

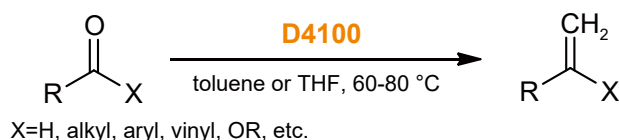
## Advantages

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

Dimethyltitanocene (D4100) is a useful methylenation 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.



product	Y. (%)	product	Y. (%)
	62		80
	90		68
	87		65

### Reference

N. A. Petasis, S.-P. Lu, E. I. Bzowej, D.-K. Fu, J. P. Staszewski, I. Akritopoulou-Zanze, M. A. Patane, Y.-H. Hu, *Pure Appl. Chem.* **1996**, 68, 667.

**Petasis Reagent (5% in Tetrahydrofuran/Toluene)**

100g / 25g [D4100]

### Related Product

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

25mL [C1411]

### Ordering and Customer Service

#### TCI AMERICA

Tel : 800-423-8616 / 503-283-1681  
Fax : 888-520-1075 / 503-283-1987  
E-mail : Sales-US@TCIchemicals.com

#### TCI EUROPE N.V.

Tel : +32 (0)3 735 07 00  
Fax : +32 (0)3 735 07 01  
E-mail : Sales-EU@TCIchemicals.com

#### TCI Deutschland GmbH

Tel : +49 (0)6196 64053-00  
Fax : +49 (0)6196 64053-01  
E-mail : Sales-DE@TCIchemicals.com

#### Tokyo Chemical Industry UK Ltd.

Tel : +44 (0)1865 784560  
Fax : +44 (0)1865 784561  
E-mail : Sales-UK@TCIchemicals.com

#### TCI Chemicals (India) Pvt. Ltd.

Tel : 1800 425 7889 / 044-2262 0909  
Fax : 044-2262 8902  
E-mail : Sales-IN@TCIchemicals.com

#### 梯希爱(上海)化成工业发展有限公司

Tel : 800-988-0390 / 021-67121386  
Fax : 021-6712-1385  
E-mail : Sales-CN@TCIchemicals.com

#### TOKYO CHEMICAL INDUSTRY CO., LTD.

Tel : +81 (0)3-5640-8878  
Fax : +81 (0)3-5640-8902  
E-mail : globalbusiness@TCIchemicals.com

Availability, price or specification of the listed products are subject to change without prior notice. Reproduction forbidden without the prior written consent of Tokyo Chemical Industry Co., Ltd.