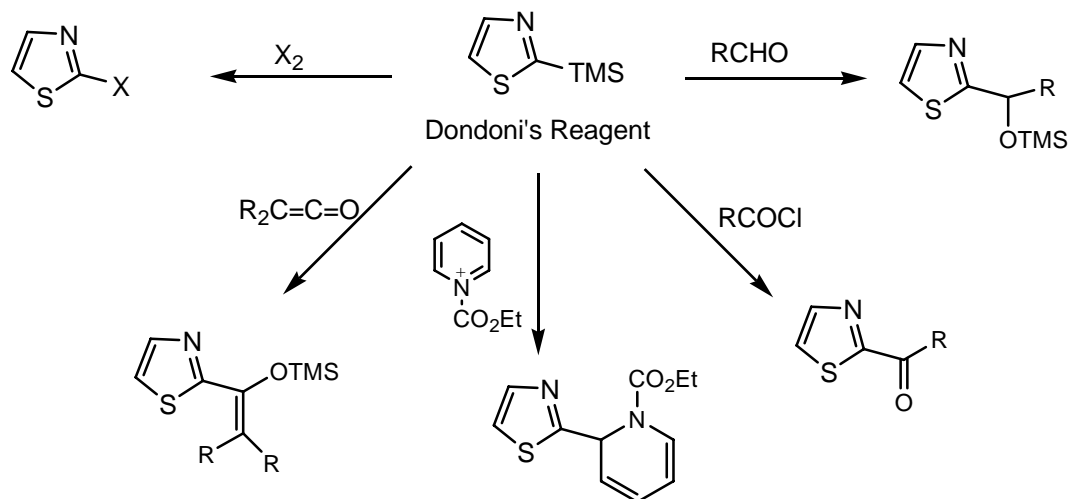


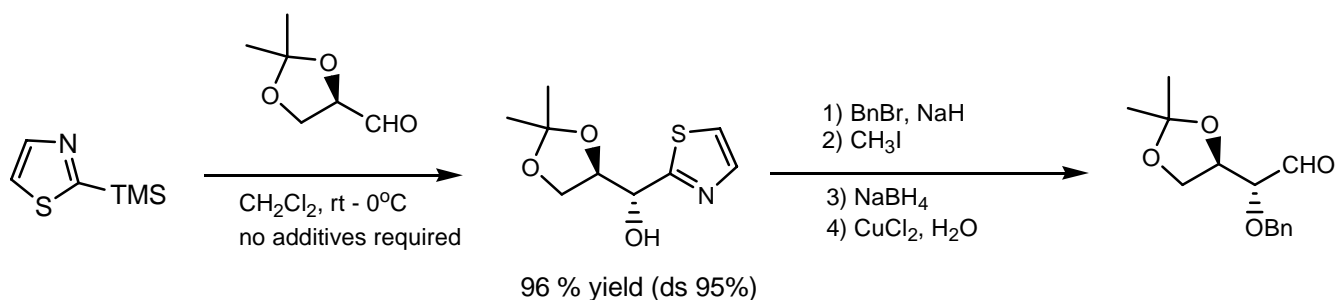
# DONDONI'S REAGENT

2-(Trimethylsilyl)thiazole (Dondoni's Reagent) is a versatile, silylated heterocycle with many synthetic applications. It is stable at room temperature, but readily desilylates in acid.

It shows remarkable reactivity with electrophiles, reacting rapidly with a variety of electrophiles under fluoride free conditions yielding 2-substituted Thiazoles.



Of special importance is the reactivity of 2-(trimethylsilyl)thiazole with chiral aldehydes which occur with high diastereoselectivity. The resulting 2-substituted thiazole molecules act as latent formyl anion equivalents. A sequence of N-methylation, reduction and hydrolysis reactions yields the free aldehydes in good yield. This has been useful synthetically, for example in iterative linear homologation in building poly-hydroxy molecules.



## References

- (1) Dondoni, A.; Marra, A. *Chem. Rev.*, **2004**, *104*, 2557-2599.
- (2) Dondoni, A. *Pure & Appl. Chem.*, **1990**, *Vol. 62*, No. 4, 643-652.
- (3) Dondoni, A.; Fantin, G.; Fogagnolo, M.; Medici, A.; Pedrini, P. *J. Org. Chem.*, **1988**, *53*, 1748-1761.

T06-S029-10G	2-(Trimethylsilyl)thiazole	10g	US\$195
T06-S029-25G	2-(Trimethylsilyl)thiazole	25g	US\$420
T06-S029-100G	2-(Trimethylsilyl)thiazole	100g	Enquire

- ✓ Organoborons
- ✓ Organosilicons
- ✓ Nucleosides & Nucleotides

## Advanced Molecular Technologies Pty Ltd

PO Box 1415 Clayton South MDC VIC 3169 Australia  
 Tel: +61 3 9565 1141 Fax: +61 3 9565 1149  
[www.amtechpl.com](http://www.amtechpl.com) [enquiries@amtechpl.com](mailto:enquiries@amtechpl.com)