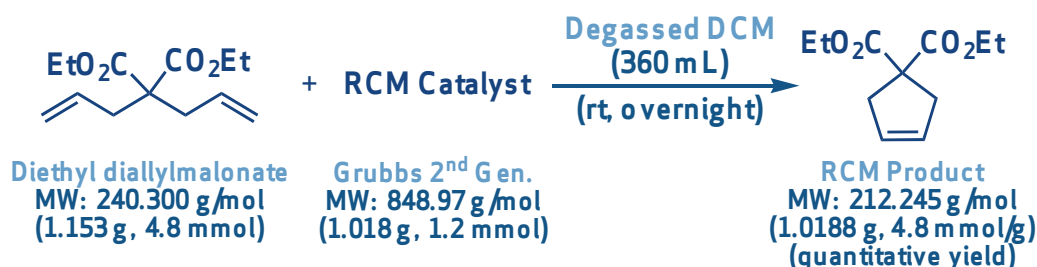


Application Note M12.0

SiliaBond Metal Scavenger: Compatible with RCM Reaction

The use of SiliaBond Metal Scavengers to remove ruthenium catalyst after ring-closing metathesis (RCM) reaction is the most effective purification method (over conventional ones). As demonstrated below, the main advantage is no product lost during the purification step.

RING-CLOSING METATHESIS (RCM) REACTION



VARIOUS PURIFICATION METHODS RESULTS AFTER RCM REACTION

Grubbs 2nd Generation: Ruthenium captation (%) after RCM reaction

	Purification Methods*					
	Scavenger SiliaBond DMT ¹	Filtration over packed bed of... ²			Flash Purification	
		Act. charcoal	Celite	Silica	Manual	Using SiliaSep [™]
Ruthenium captation	93.3%	72.5%	23.6%	58.3%	69.6%	73.4%

¹Using 4 eq., 16h, 22°C. ²Solution passed directly on a packed bed of various adsorbents, then washed with the same quantity of solvent.

*Quantitative yield obtained for each purification method (adjusted in function of the residual concentration of catalyst). No impurity added with all methods (determined by NMR).