

# Application Note M5.0

## Scavenging a Nickel Catalyst

A metal scavenging study using **SiliaBond Metal Scavengers** products was conducted on a nickel catalyst commonly used in organic synthesis. Various parameters were studied for their influence on the scavengers' robustness as well as to establish the best conditions to bring the level of metal down to an acceptable level for the pharmaceutical industry (i.e.: solvent, number of equivalents, temperature, and reaction time).

### SCAVENGING A NICKEL CATALYST RESULTS

Ni(acac)<sub>2</sub>: Residual Nickel Concentration

Scavengers	Conditions	Ni (ppm)
SiliaBond Diamine	4eq., 4h, 22°C	8.8
SiliaBond TAAcOH	4eq., 4h, 22°C	< 1
SiliaBond TAAcONa	4eq., 4h, 22°C	< 1
SiliaBond DMT	4eq., 16h, 80°C	11.1

Initial concentration: 500 ppm in DMF

