

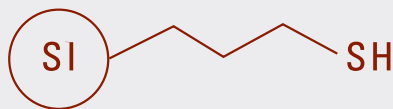


Nexgen Purifications Metal Scavenging

Thiopropyl

Nexgen Purifications Metal Scavenging Line is designed to retain excess organometallic catalysts commonly utilized in industrial synthesis enabling purification by simple filtration. Specific impurities are targeted including precious metals such as Pd, Pt, Ru and Rh to isolate the final desired product. Our Nexgen Purifications Metal Scavengers are highly selective in achieving the necessary purity levels for metal contamination, cost-effective, and available in cartridge format or bulk quantities.

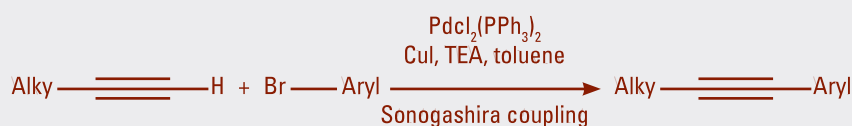
Nexgen Purifications - Metal Scavenging Thiopropyl



Loading: 1.6 mmol/g
Surface Area: 500 m²/g
Average Pore Size: 60Å
Pore Volume: 0.77 cm³/g

Metals Targeted**Best Metals Scavenged:** Ag, Hg, Os, Pd & Ru**Good Metals Scavenged:** Cu, Ir, Pb, Rh & Sn

Case Study: Removal of Palladium from Sonogashira Coupling Reaction Using Various Metal Scavengers



| Scavenger name | Pd in toluene solution (ppm) | Pd with respect to substrate (ppm) |
|--|------------------------------|------------------------------------|
| No Scavenger (Control) | 45.0 | 1800 |
| Nexgen Purifications Silica Thiopropyl | < 3 | < 120 |
| Nexgen Purifications Silica Triamine | 3.9 | 156 |
| Competitor 1 MTcf | < 3 | < 120 |
| Competitor 1 SPM32-f | 3.0 | 120 |
| Competitor 1 SPM32 | < 3 | < 120 |
| Competitor 1 SPM36-f | 4.9 | 196 |
| Competitor 1 SEM 26 | 4.0 | 160 |
| Competitor 1 SPM36 | 6.7 | 268 |
| Competitor 1 SEA | 4.7 | 188 |
| Competitor 1 STA 3 | 4.9 | 196 |
| Competitor 2 MP | 5.4 | 216 |
| Competitor 2 TA | 6.2 | 248 |
| Competitor 2 AP | 4.4 | 176 |
| Competitor 3 Thiourea | < 3 | < 120 |
| Competitor 3 -Thiol | 5.0 | 200 |
| Competitor 3 DMT | 4.0 | 160 |
| Competitor 3 diamine | 7.4 | 296 |
| Competitor 3 triamine | 5.0 | 200 |
| Competitor 4 -TU | 20.5 | 820 |
| Competitor 4-BZA | 16.2 | 648 |
| Competitor 5 SA-FC Si-1 | 8.6 | 344 |

*All samples were incubated overnight at ambient temperature before filtration and all of them received 50 wt% loading of scavenger.

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