

SiliCycle



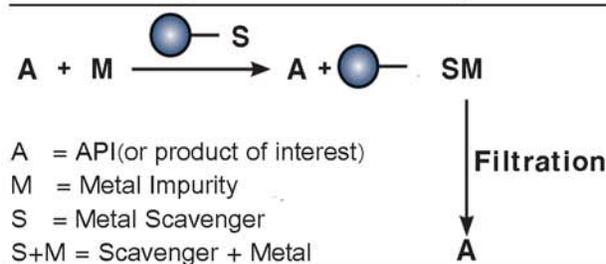
SiliaMetS®-Metal Scavengers

Metal Scavenger란 무엇인가?

화학 반응에서 반응 후 잔류된 금속성 촉매들을 기능성 실리카에 반응시켜 회수하는 것을 말하며, SiliaMetS는 실리카겔에 화학물질을 결합시켜 선택적으로 잔류금속 이온을 회수 하는 제품 입니다.

Siliacyle사는 이 분야 에서는 마켓 리더로서 ,10여년 전부터 Metal Scavenger를 생산해오고 있으며 전세계 메이저 제약회사들에 공급해오고 있습니다. 예를들면, GlaxoSmithkline, Amgen, AstraZeneca, Pfizer, Johnson&Johnson 등이 있습니다. 의약품 속에 함유된 중금속이 인체에 축적되는 것을 방지하기 위하여 선진국에서는 의약품 개발에서부터 잔류중금속에 대한 함량을 엄격하게 제한하고 있습니다.

What is a Supported Metal Scavenger?



To be effective, the Metal Scavengers need the ability and inherent functionality to remove metals in their various oxidation states from the reaction mixture. For example, upon completion of a palladium metal-catalyzed reaction, the metal residue contained in the reaction can exist in both Pd(0) and Pd(II).

SiliCycle is THE world leader and THE pioneer in metal scavenging solutions. Reasons to choose us:

- Over 12 year of know-how in silica-grafting and metal scavenging technology
- Strong, extensive, and confidential technical support and scientists to help you
- Broadest portfolio of scavenger (wide variety of ligands) and applications developed
- Wide range of formats for all purification scales: from laboratory to plant scale purification
- Cited in many external publications (and patents) used by satisfied customers



SiliaMetS-Regulatory Information

For many years, SiliaMetS Metal Scavengers have been used in pilot plants by GMP Pharmaceutical, biotechnology, and fine chemical industries as well as contract research and manufacturing organizations. They have run their own analysis proving SiliaMetS Metal Scavengers can safely be used without compromising the purity of the material by leaching of the silica-supported product. Thus, SiliCycle is committed to high quality standards and always strives to provide defect-free products. In doing so, all products are manufactured in an ISO 9001:2008 compliant facility and subjected to a stringent quality control. Every lot needs to meet the quality specification and a sample from every batch is kept for subsequent analysis. All products are shipped with the following information.



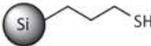
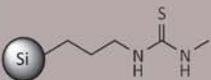
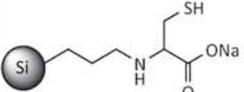
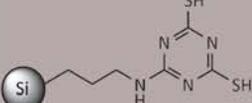
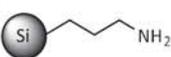
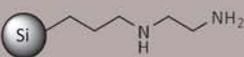
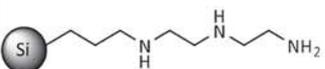
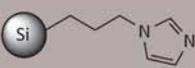
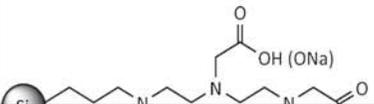
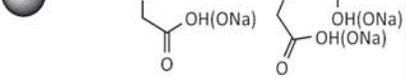
- Certificate of Analysis
 - Purity (Leachables and extractables)
 - Molecular loading
 - Surface Coverage
 - Volatile Content
- Material Safety Data Sheets (MSDS)
- BSE/TSE Declaration (no animal origin)
- Relevant Technical Information

Need specific regulatory files? SiliCycle can work with you to fill your requirements and provide you custom regulatory documentation including specific analytical tests in line with your needs.

SiliaMetS[®] -Metal Scavenger

SiliaMetS Product Range

SiliCycle, a leader in functionalized silica gel, has developed a wide range of scavenger to remove a variety of metals at competitive prices.

SiliaMetS Scavengers Catalysts Portfolio			
SiliaMetS Name	Product Number	Structure	Metals Removed
SiliaMetS Thiol	R51030B		Ag, Hg, Os, Pd ⁺ , Pd ⁰ & Ru Cu, Ir, Pd, Rh ⁺ , Rh ²⁺ , Rh ³⁺ Sc, Sn
SiliaMetS Thiourea	R69530B		Pd ⁺ , Pd ⁰ Ag, Cu, Fe, Os, Rh ⁺ , Rh ²⁺ Rh ³⁺ , Sc, Sn
SiliaMetS Cysteine	R80530B		Cd, Fe, Ir, Os, Ru, Sc & Sn Ca, Cr, Cs, Cu, La, Mg, Pd ²⁺ Pd ⁰ , Pt, Rh ⁺ , Rh ²⁺ & Zn
SiliaMetS DMT	R79030B		Ir, Ni, Os, Pd ⁺ , Pd ⁰ , Pt, Rh ⁺ Rh ²⁺ , Rh ³⁺ & Ru Cd, Co, Cu, Fe, Sc & Zn
SiliaBond Amine	R52030B		Cd, Cr, Pt, Rh ⁺ & Rh ²⁺ Co, Cu, Fe, Hg, Pb, Pd ²⁺ W & Zn
SiliaMetS Diamine	R49030B		Cr, Pd ²⁺ , Pd ⁰ & Pt Cd, Co, Cu, Fe, Hg, Ni, Pb Ru, W & Zn
SiliaMetS Triamine	R48030B		Cr, Pb, Pd ²⁺ , Pd ⁰ & Pt Co, Cu, Fe, Ni, Ru, W & Zn
SiliaMetS Imidazole	R79230B		Cd, Co, Cu, Fe, Ni, Os, W & Zn Cr, Pd ²⁺ , Pd ⁰ , Rh ⁺ & Rh ²⁺
SiliaMetS TAAcOH	R69030B		Co, Ni, Os & SC Cr, Cs, Fe, Pd ²⁺ , Pd ⁰ , Rh ⁺ Rh ²⁺ & Sn
Silia MetS TAAcONa	R69230B		Cd, Cs, Cu, Fe, Ir, La, Li Mg, Ni, Os, Rh ⁺ , Sc & Sn, Cr, Pd ²⁺ , Pd ⁰ , Rh ⁺ , Rh ²⁺ & Zn

All SiliaMetS are made of standard flash silica gel, namely 40-63 microns, 60 Å.

SiliaMetS Typical Characteristics					
Color	Endcapping	Molecular Loading	Typical Tap Density	Solvent Compatibility	Prolonged Storage
White	Yes	1.20 mmol/g	682g/L	All solvents, aqueous and organic	Keep dry
Off-White	Yes	1.20 mmol/g	767g/L	All solvents, aqueous and organic	Keep dry
Orange	Yes	0.30 mmol/g	665g/L	All organic solvent	Keep dry under argon
Light brown	Yes	0.50 mmol/g	732g/L	All solvents, aqueous and organic	Keep dry
Off-White	Yes	1.20 mmol/g	700g/L	All solvents, aqueous and organic	Keep cool (<8 °C) and dry
Off-White	Yes	1.20 mmol/g	728g/L	All solvents, aqueous and organic	Keep cool (<8 °C) and dry
Off-White	Yes	1.20 mmol/g	736g/L	All solvents, aqueous and organic	Keep cool (<8 °C) and dry
Off-White	Yes	1.20 mmol/g	681g/L	All solvents, aqueous and organic	Keep dry
Off-White	No	0.40 mmol/g	635g/L	All solvents, aqueous and organic	Keep dry
Off-White	No	0.40 mmol/g	712g/L	All solvents, aqueous and organic	Keep dry

Preferred SiliaMetS Metal Scavengers for these metals Also Scavenger these metals