
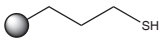
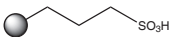
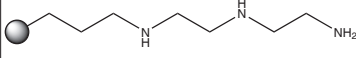
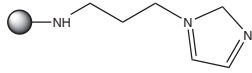
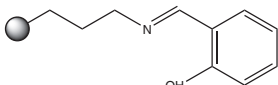


The Johnson Matthey QuadraSil™ range of metal scavengers offers an attractive solution to metal contamination problems associated with pharmaceutical and fine chemical processing, complementing the Smopex® fibre and QuadraPure™ scavenger resin ranges.

The QuadraSil™ products are functionalized silicas specifically designed for extraction of metal contaminants from organic and aqueous systems. As with the Smopex® and QuadraPure™ range, the very low levels of extractable impurities make these products particularly suitable for GMP-compliant applications in both batch and continuous processing. The QuadraSil™ series are ideal for use in R&D applications as they offer extremely fast scavenging and are easy to isolate by filtration.

The QuadraSil™ product range includes:

QuadraSil™	Functionality	Capacity Mmol/g	Metals Removed
AP	 Amino propyl	2.0	Pd, Ru, Rh, Cu, Fe, Co, Ni
MP	 Mercapto propyl	1.2	Pd, Pt, Rh, Ru, Cu, Pb, Ag, Hg
SA	 Sulphonic acid	1.4	Pd, Rh, Cu, Ru, Pb, Fe, Co
TA	 Triamine	1.0	Pd, Pt, Rh, Co, Cu, Fe, Ru, Cd, Au, V, Zn
IMDAZ	 Amino imidazole	1.2	Rh, Pd, Fe, Ru, Co, Ni
PHI	 Phenolic imine	1.0	Rh, Pd, Cu, Fe, Co, Ni

Quantities for dosage: In metal contaminated organic solvents, direct addition of QuadraSil™ will effect scavenging. Typically, add 5 g per 100 ml metal-contaminated solution and leave to gently agitate at room temperature. Metal removal is often complete in five minutes and can frequently be observed by a colour change in both the scavenger and the solution. The silica is simply removed by filtration.

Solvent Compatibility: Excellent compatibility across a range of common solvents such as water, DMF, THF, methanol, toluene, acetone, DCM. They can also be used over a wide pH range.

Temperature Stability: Max 100°C. Works well at ambient temperature.

Stirring Mechanisms: Will not break up during stirring.

Recommended filtering equipment: The QuadraSil™ particles are highly robust and chemically resistant free-flowing silicas. The narrow particle size distribution, highly spherical shape and zero swell makes these products suitable for use in fixed bed and cartridge format.

Alfa Aesar offers the following products from stock globally:

Item	Description	Sizes
46303	QuadraSil AP, 20-100 micron	5g, 25g, 100g
46259	QuadraSil MP, 20-100 micron	5g, 25g, 100g
46188	QuadraSil MTU, 20-100 micron	5g, 25g, 100g
46094	QuadraSil PHI, 20-100 micron	5g, 25g, 100g
46218	QuadraSil TA, 20-100 micron	5g, 25g, 100g