

# JM

## Metal Scavengers

Johnson Matthey's range of metal scavengers comprises of macroporous polymer and silica beads for metal impurity removal from organic and aqueous process streams.



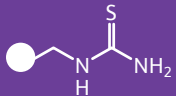
## QuadraPure™ TU

### Polymer beads for metal impurity removal

JM's QuadraPure™ TU comprises of spherical macroporous beads for metal impurity removal from organic and aqueous API streams.

#### Key features

- **Spherical beads with narrow particle size distribution for controlled metal uptake**
- **Selective metal uptake**
  - Minimal impact on yield
- **Wide solvent compatibility range**
- **Excellent flow characteristics in packed cartridge**
  - Specific PSD allows optimised flow characteristics
  - Allows use in potent systems where containment is critical

	PSD	Functional group		Mode of action	Impurity targets
QuadraPure™ TU	400 – 600 µm		Thiourea	Complexation/ ligand exchange	Pd, Pt, Rh, Ru, Cu



## QuadraSil™

### Silica beads for metal impurity removal

JM's QuadraSil™ range of silica based scavengers, are comprised of both spherical and non-spherical silica beads for metal impurity removal from both process and API streams.

#### Key features

- **High surface areas – optimising scavenging potential**
  - Fast kinetics for metal uptake
- **Excellent performance at room temp**
  - Reduces utility and operational costs
  - Allows use in temperature restricted systems
- **Selective metal uptake**
  - Minimal impact on yield
- **Wide solvent compatibility range**
- **Easily packed into a cartridge**
  - Zero swell – simplifies engineering of cartridge system to optimise scavenging performance
  - Allows use in potent systems where containment is critical

	PSD	Functional group		Mode of action	Impurity targets
QuadraSil™ MP(S) Spherical	20 - 100 µm		Mercapto	Complexation/ ligand exchange	Pd, Pt, Rh, Ru, Cu
QuadraSil™ MP(I) Irregular	250 - 710 µm		Mercapto	Complexation/ ligand exchange	Pd, Pt, Rh, Ru, Cu