



Metals Scavenging Agent Kit

Metals removal for heterogeneous and homogeneous applications

Sold in collaboration with

BASF

The Chemical Company

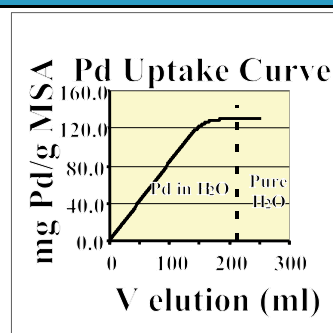
metals • inorganics • organometallics • catalysts • ligands • custom synthesis • cGMP facilities • nanomaterials

BASF metals scavenging agents (MSA'S) are alumina, carbon or silica-based air stable free flowing powders with proprietary surface coatings. These are suitable for the removal of precious and base metal species from organic, aqueous, protic and aprotic reaction mixtures with metal loading capacities up to 13 wt% (depending on metal and process conditions). MSA's are designed for fixed bed or slurry applications, are temperature stable up to 150° C and do not exhibit swelling seen with polymer-based systems. Metals removed include: Pt, Pd, Rh, Ru, Ir, Ni, Cu, Fe.

Research quantities available from Strem.

Commercial quantities available from BASF.

More details available at www.strem.com/msa.



(H₂PdCl₄ from H₂O) with MSA 14-4353

96-6700

BASF Metals Scavenging Agent Kit
Contains 10g unit of each of the following

Strem Cat. No.	13-6300	06-0805	14-4351	14-4353
BASF No.	MSA-FC Al-1	MSA-FC C-1	MSA-FC Si-1	MSA-FC Si-3
Description	Phosphotungstic acid modified alumina	Phosphotungstic acid modified activated carbon	Ethylenediamine modified silica	Mercaptopropyl modified silica
Max metal loading capacity (wt%)	1%	5%	11%	13%
color & form	white powder	black powder	white to slightly yellow powder	white to slightly yellow powder
Stability	air stable	air stable	air stable	air stable
Suitable Reaction Mixtures				
Aqueous	Yes	No	Yes	Yes
Organic	Yes	Yes	Yes	Yes
Polar and Apolar	Yes	Yes	Yes	Yes
Slurry or fixed bed application	Yes	Yes	Yes	Yes
Temperature Stability	≤ 150° C	≤ 110° C	≤ 110° C	≤ 110° C
Comments		Presence of water and small chain alcohols may impact total uptake capacity.	Especially suitable for scavenging Pt remains and metal complexes in the presence of other ionic components.	Especially suitable for scavenging Pd remains.
Typical Applications	<ul style="list-style-type: none"> •Pd(PPh₃)₄ from THF •Ir(COD)Cl₂ from EtOH •Ru(BINAP)Cl₂ from isopropanol •Rh(DiPFc)(COD)BF₄ from EtOH 	<ul style="list-style-type: none"> •Pd-acetate with 2 equivalents of PPh₃ from acetone •Rh(DUPHOS)(COD)BF₄ from isopropanol •Reaction mixture of a hydrogenation reaction using Rh(DUPHOS) •Rh(PPh₃)Cl from toluene 	<ul style="list-style-type: none"> •Pd from Heck reaction mixture •CuCl₂ from e.g. EtOH, CH₃CN, H₂O •H₂PdCl₄ from e.g. EtOH, H₂O (pH=2.3) •Rh(COD)Cl from EtOH •NiCl₂ from H₂O •H₂PtCl₆ from technical EtOH 	<ul style="list-style-type: none"> •Pd from Heck reaction mixture •H₂PdCl₄ from EtOH •H₂PdCl₄ from H₂O

Visit www.strem.com for new product information and searchable catalog.

Strem Chemicals, Inc.
7 Mulliken Way
Newburyport, MA 01950-4098
U.S.A.
Tel.: (978) 499-1600
Fax: (978) 465-3104
Email: info@strem.com

Strem Chemicals, Inc.
15, rue de l'Atome
Zone Industrielle
67800 BISCHHEIM France
Tel.: (33) 03 88 62 52 60
Fax: (33) 03 88 62 26 81
Email: strem.europe@wanadoo.fr

Strem Chemicals, Inc.
Postfach 1215
77672 KEHL
Germany
Telefon: 0 78 51/ 7 58 79
Email: strem.europe@wanadoo.fr

Strem Chemicals UK
48 High Street
Orwell, Royston
England SG8 5QN
Tel.: 01223 207430
Fax: 01223 208138
Email: stremchemicals.uk@btinternet.com

96-6700	BASFMetals Scavenging Agent Kit Contains 10g unit of each of the MSA'S below. Components available for individual sale.	1 kit
13-6300	Metals scavenging agent, Phosphotungstic acid modified alumina (BASF MSA-FC Al-1) d50=159 µm; white pwdr.; d. 1.00 g/ml	10g 50g
Technical Note: 1. Alumina-based, air stable, metal scavenging agent (MSA-FC Al-1) powder suitable for the removal of dissolved metal species from organic and aqueous polar and apolar reaction mixtures. Can be used in slurry and fixed bed type applications. Temperature stable up to 150°C. Metal loading capacity up to 1 wt% depending on metal and process conditions. Particularly effective in polar solvents.		
06-0805	Metals scavenging agent, Phosphotungstic acid modified activated carbon (BASF MSA-FC C-1) d50=27 µm; black pwdr.; d. 0.60 g/ml	10g 50g
Technical Note: 1. Carbon-based, air stable, metal scavenging agent (MSA-FC C-1) powder suitable for the removal of dissolved metal species from organic polar and apolar reaction mixtures. Can be used in slurry and fixed bed type applications. Temperature stable up to 110°C. The presence of water and small chain alcohols may impact the total uptake capacity. Metal loading capacity up to 5 wt% depending on metal and process conditions.		
14-4351	Metals scavenging agent, Ethylenediamine modified silica (BASF MSA-FC Si-1) d50=83 µm; white to slightly yellow pwdr.; d. 0.88 g/ml	10g 50g
Technical Note: 1. Silica-based, air stable, metal scavenging agent (MSA-FC Si-1) powder suitable for the removal of dissolved metal species from organic and aqueous polar and apolar reaction mixtures. Can be used in slurry and fixed bed type applications. Temperature stable up to 110° C. Especially suitable for the scavenging of platinum remains and metal complexes in the presence of other ionic components. Metal loading capacity up to 11% depending on metal and process conditions.		
14-4353	Metals scavenging agent, Mercaptopropyl modified silica (BASF MSA-FC Si-3) d50=83 µm; white to slightly yellow pwdr.; d. 0.88 g/ml	10g 50g
Technical Note: 1. Silica-based, air stable, metal scavenging agent (MSA-FC Si-3) powder suitable for removal of dissolved metal species from organic and aqueous polar and apolar reaction mixtures. Can be used in slurry and fixed bed type applications. Temperature stable up to 110° C. Especially suitable for use in the removal of palladium remains. Metal loading capacity is up to 13% depending on metal and process conditions.		

Visit www.strem.com for new product information and searchable catalog.

Strem Chemicals, Inc.
7 Mulliken Way
Newburyport, MA 01950-4098
U.S.A.
Tel.: (978) 499-1600
Fax: (978) 465-3104
Email: info@strem.com

Strem Chemicals, Inc.
15, rue de l'Atome
Zone Industrielle
67800 BISCHHEIM France
Tel.: (33) 03 88 62 52 60
Fax: (33) 03 88 62 26 81
Email: strem.europe@wanadoo.fr

Strem Chemicals, Inc.
Postfach 1215
77672 KEHL
Germany
Telefon: 0 78 51/ 7 58 79
Email: strem.europe@wanadoo.fr

Strem Chemicals UK
48 High Street
Orwell, Royston
England SG8 5QN
Tel.: 01223 207430
Fax: 01223 208138
Email: stremchemicals.uk@btinternet.com