

# STREM Chemical Vapor Deposition / Atomic Layer Deposition (CVD/ALD) Precursors contained in Swagelok® Cylinders

| Catalog # | Catalog # of Product contained | Product Name   | CAS#         | Quantity in Swagelok® cylinder |
|-----------|--------------------------------|--|--------------|--------------------------------|
| 98-4036   | 93-1402                        | 3-Aminopropyltriethoxysilane, 98%, 93-1402, contained in 50 ml Swagelok® cylinder for CVD/ALD  | 919-30-2     | 25g                            |
| 98-4060   | 25-0200                        | Bis(cyclopentadienyl)manganese, 98+%, 25-0200, contained in 50 ml Swagelok® cylinder for CVD/ALD   | 73138-26-8   | 10g<br>25g                     |
| 98-4038   | 26-0145                        | Bis(N,N'-di-t-butylacetamidinato)iron(II), min. 98%, 26-0145, contained in 50 ml Swagelok® cylinder for CVD/ALD  | 635680-56-7  | 5g                             |
| 98-4065   | 25-0210                        | Bis(ethylcyclopentadienyl)manganese, min. 98%, 25-0210, contained in 50 ml Swagelok® cylinder for CVD/ALD  | 101923-26-6  | 10g<br>25g                     |
| 98-4006   | 12-0510                        | Bis(ethylcyclopentadienyl)magnesium, min. 98%, 12-0510, contained in 50 ml Swagelok® cylinder for CVD/ALD  | 114460-02-5  | 10g                            |
| 98-4009   | 44-0040                        | Bis(ethylcyclopentadienyl)ruthenium(II), 98% (99.9%-Ru), 44-0040, contained in 50 ml Swagelok® cylinder for CVD/ALD                                      | 32992-96-4   | 10g                            |
| 98-4045   | 73-0700                        | t-Butylimidotris(dimethylamido)tantalum(V), min. 98%, 73-0700, contained in 50 ml Swagelok® cylinder for CVD/ALD   | 69039-11-8   | 10g<br>25g                     |
| 98-4057   | 97-3425                        | Cyclopentadienylindium (I), elec. gr. (99.99+%-In) PURATREM, 97-3425, contained in 50 ml Swagelok® cylinder for CVD/ALD                                  | 34822-89-4   | 5g                             |
| 98-4054   | 97-3425                        | Cyclopentadienylindium (I), elec. gr. (99.99+%-In) PURATREM, 97-3425, contained in 50 ml <b>electropolished Swagelok® cylinder (96-1077)</b> for CVD/ALD | 34822-89-4   | 5g                             |
| 98-4052   | 50-1150                        | N,N'-Di-t-butyl-2,3-diamidobutanetin(III), 98%, 50-1150, contained in 50 ml Swagelok® cylinder for CVD/ALD   | 1268357-44-3 | 5g                             |
| 98-4000   | 93-3030                        | Diethylzinc, min. 95%, 93-3030, contained in 50 ml Swagelok® cylinder for CVD/ALD  | 557-20-0     | 25g                            |
| 98-4001   | 97-5061                        | Dimethylzinc, 99%, 97-5061, contained in 50 ml Swagelok® cylinder for CVD/ALD  | 544-97-8     | 25g                            |
| 98-4002   | 97-5060                        | Dimethylzinc, elec. gr. (99.999%-Zn) PURATREM, 97-5060, contained in 50 ml <b>electropolished Swagelok® cylinder (96-1077)</b> for CVD/ALD               | 544-97-8     | 10g                            |
| 98-4043   | 22-1050                        | Tetrakis(diethylamino)titanium(IV), 99%, 22-1050, contained in 50 ml Swagelok® cylinder for CVD/ALD  | 4419-47-0    | 10g                            |
| 98-4021   | 72-8000                        | Tetrakis(dimethylamino)hafnium, 98+% (99.99+%-Hf, <0.2%-Zr) TDMAH, PURATREM, 72-8000, contained in 50 ml Swagelok® cylinder for CVD/ALD                  | 19962-11-9   | 25g                            |
| 98-4050   | 50-1815                        | Tetrakis(dimethylamino)tin(IV), 99% (99.99%) TDMASn PURATREM, 50-1815, contained in 50 ml Swagelok® cylinder for CVD/ALD                                 | 1066-77-9    | 10g                            |
| 98-4015   | 93-2240                        | Tetrakis(dimethylamino)titanium(IV), 99% TDMAT, 93-2240, contained in 50 ml Swagelok® cylinder for CVD/ALD   | 3275-24-9    | 25g                            |
| 98-4012   | 40-4100                        | Tetrakis(dimethylamino)zirconium(IV), 99% TDMAZ, 40-4100, contained in 50 ml Swagelok® cylinder for CVD/ALD  | 19756-04-8   | 25g                            |
| 98-4048   | 72-7720                        | Tetrakis(ethylmethylamino)hafnium, 99% (99.99+%-Hf, <0.15% Zr) PURATREM, 72-7720, contained in 50 ml Swagelok® cylinder for CVD/ALD                      | 352535-01-4  | 10g                            |
| 98-4039   | 40-1710                        | Tetrakis(ethylmethylamino)zirconium(IV) 99% TEMAZ, 40-1710, contained in 50 ml Swagelok® cylinder for CVD/ALD  | 175923-04-3  | 10g                            |
| 98-4033   | 22-1150                        | Titanium(IV) chloride, 99.8+%, 22-1150, contained in 50 ml Swagelok® cylinder for CVD/ALD  | 7550-45-0    | 25g                            |
| 98-4030   | 93-2216                        | Titanium(IV) i-propoxide, min. 98%, 93-2216, contained in 50 ml Swagelok® cylinder for CVD/ALD   | 546-68-9     | 25g                            |
| 98-6025   | 14-7015                        | Tri-t-butoxysilanol (99.999%-Si) PURATREM 14-7015 contained in 50 ml <b>electropolished Swagelok® cylinder (96-1077)</b> for CVD/ALD                     | 18166-43-3   | 25g                            |
| 98-4003   | 93-1360                        | Trimethylaluminum, min. 98%, 93-1360, contained in 50 ml Swagelok® cylinder for CVD/ALD  | 75-24-1      | 25g                            |
| 98-4008   | 98-1955                        | Trimethylaluminum, elec. gr. (99.999+%-Al) PURATREM, 98-1955, contained in 50 ml Swagelok® cylinder for CVD/ALD  | 75-24-1      | 25g                            |

Visit [www.strem.com](http://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](mailto:info@strem.com)

**Strem Chemicals, Inc.**  
15, rue de l'Atome  
Zone Industrielle  
67800 BIRSCHHEIM France  
Tel.: (33) 03 88 62 52 60  
Fax: (33) 03 88 62 26 81  
Email: [info.europe@strem.com](mailto:info.europe@strem.com)

**Strem Chemicals, Inc.**  
Postfach 1215  
77672 KEHL  
Germany  
Telefon: 0 78 51/ 7 58 79  
Email: [info.europe@strem.com](mailto:info.europe@strem.com)

**Strem Chemicals UK, Ltd.**  
41 Hills Road  
Cambridge  
England CB2 1NT  
Tel.: 0845 643 7263  
Fax: 0845 643 7362  
Email: [enquiries@strem.co.uk](mailto:enquiries@strem.co.uk)

|         |         |   |            |            |
|---------|---------|---|------------|------------|
| 98-4007 | 98-1955 | Trimethylaluminum, elec. gr. (99.999+%-Al) PURATREM, 98-1955, contained in 50 ml <b>electropolished Swagelok® cylinder (96-1077)</b> for CVD/ALD                        | 75-24-1    | 25g        |
| 98-4068 | 31-2000 | Trimethylgallium, 99+%, 31-2000, contained in 50 ml Swagelok® cylinder for CVD/ALD  | 1445-79-0  | 10g<br>25g |
| 98-4047 | 98-2000 | Trimethylgallium, elec. gr. (99.9999%-Ga) PURATREM, 98-2000, contained in 50 ml <b>electropolished Swagelok® cylinder (96-1077)</b> for CVD/ALD                         | 1445-79-0  | 10g        |
| 98-4056 | 98-2010 | Trimethylindium, elec. gr. (99.999%-In) PURATREM, 98-2010, contained in 50 ml <b>electropolished Swagelok® cylinder (96-1077)</b> for CVD/ALD                           | 3385-78-2  | 25g        |
| 98-4024 | 78-1350 | (Trimethyl)methylcyclopentadienylplatinum(IV), 99%, 78-1350, contained in 50 ml Swagelok® cylinder for CVD/ALD  | 94442-22-5 | 10g        |
| 98-6028 | 14-7020 | Tri-t-pentoxysilanol (99.999%-Si) PURATREM 14-7020 contained in 50 ml <b>electropolished Swagelok® cylinder (96-1077)</b> for CVD/ALD                                   | 17906-35-3 | 25g        |
| 98-4018 | 39-1500 | Tris[N,N-bis(trimethylsilyl)amide]yttrium, min. 98% (99.9%-Y) (REO), 39-1500, contained in 50 ml Swagelok® cylinder for CVD/ALD   | 41836-28-6 | 10g        |
| 98-4035 | 14-8750 | Tris(dimethylamino)silane, 99+%, 14-8750, 14-8750, contained in 50 ml Swagelok® cylinder for CVD/ALD  | 15112-89-7 | 25g        |
| 98-4027 | 98-0147 | Silicon(IV) chloride, fiber optic grade (99.9999%-Si, 50ppm-Fe) PURATREM, 98-0147, contained in a 50 ml <b>electropolished Swagelok® cylinder (96-1077)</b> for CVD/ALD | 10026-04-7 | 50g        |

Technical Note: Swagelok® Cylinder Assembly (96-1070), composed of a 50 ml Cylinder, a 1/4" VCR Male Ball Valve, and a Female Nut.

96-1070



23.5cm

Swagelok®

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Standard Ball Valve



High Temp Bellows-Sealed Valve



Female Nut



Silverplated Gasket Assembly



Cylinder body

\*High Temperature Swagelok® cylinder assembly 96-1071 (<http://www.strem.com/catalog/v/96-1071/>) available at extra cost

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**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](mailto:info@strem.com)

**Strem Chemicals, Inc.**  
15, rue de l'Atome  
Zone Industrielle  
67800 BIRSCHHEIM France  
Tel.: (33) 03 88 62 52 60  
Fax: (33) 03 88 62 26 81  
Email: [info.europe@strem.com](mailto:info.europe@strem.com)

**Strem Chemicals, Inc.**  
Postfach 1215  
77672 KEHL  
Germany  
Telefon: 0 78 51/ 7 58 79  
Email: [info.europe@strem.com](mailto:info.europe@strem.com)

**Strem Chemicals UK, Ltd.**  
41 Hills Road  
Cambridge  
England CB2 1NT  
Tel.: 0845 643 7263  
Fax: 0845 643 7362  
Email: [enquiries@strem.co.uk](mailto:enquiries@strem.co.uk)

96-1077 Swagelok® Cylinder Assembly, 50ml with ¼" VCR Male DP Valve (Ultra High Purity) and Female Nut, electropolished components



EP Male DP high pressure  
Diaphragm Valve



EP Female Nut



EP Unplated  
Gasket Assembly



EP Cylinder body

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

**Strem Chemicals, Inc.**  
15, rue de l'Atome  
Zone Industrielle  
67800 BIRSCHHEIM France  
Tel.: (33) 03 88 62 52 60  
Fax: (33) 03 88 62 26 81  
Email: [info.europe@strem.com](mailto:info.europe@strem.com)

**Strem Chemicals, Inc.**  
Postfach 1215  
77672 KEHL  
Germany  
Telefon: 0 78 51/ 7 58 79  
Email: [info.europe@strem.com](mailto:info.europe@strem.com)

**Strem Chemicals UK, Ltd.**  
41 Hills Road  
Cambridge  
England CB2 1NT  
Tel.: 0845 643 7263  
Fax: 0845 643 7362  
Email: [enquiries@strem.co.uk](mailto:enquiries@strem.co.uk)