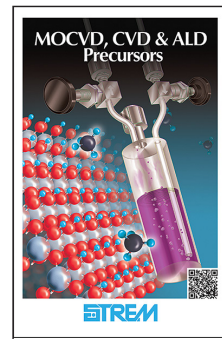


Strem Chemicals, Inc., established in 1964, is a privately held manufacturer and marketer of specialty chemicals of high purity. Strem's key products include catalysts, ligands, organometallics, metal carbonyls, CVD/ALD precursors and nanomaterials. Its products are used for research and development and commercial scale applications, especially in the pharmaceutical, microelectronics, chemicals and petrochemicals industries. Strem Chemicals also provides custom synthesis, process development and cGMP manufacturing services. Strem is an ISO 9001:2015 certified company. For more information, visit [strem.com](http://strem.com).



## CVD/ALD services:

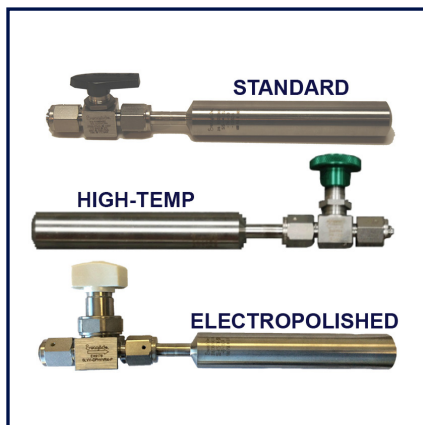
- PRECURSOR FILLING, REFILLING & CLEANING SERVICES
- DOT & UN APPROVED CONFIGURATIONS
- PREPACKAGED PRECURSORS IN ALD CYLINDERS

## Over 450 CVD/ALD precursors including:

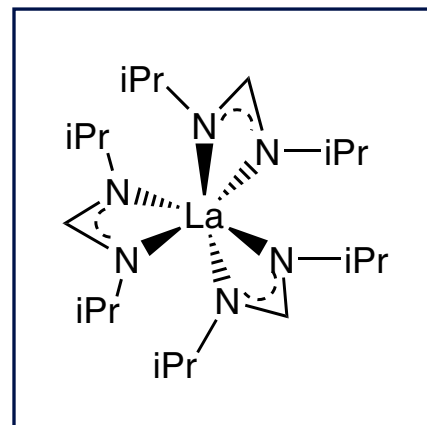
- Metal Alkyls
- Metal Alkylamides
- Metal Alkoxides
- Metal Amidinates
- Metal  $\beta$ -diketonates
- Volatile Metal Carbonyls
- Volatile Organometallics
- Electronic grade chemicals
- Fluorinated derivatives
- Silanes & Silanols
- Halides



**Electropolished stainless steel bubblers at capacities ranging from 150ml to 3000ml.** These bubblers are available in horizontal-in-line and vertical configurations. While standard bubblers are equipped with diaphragm valves rated to 121°C (PTFE stem tips), we also supply bubblers with high temperature bellows valves rated to 315°C. DOT and UN approved configurations are available.



**A variety of cylinders for ALD are available.** This includes standard, high-temperature and high-purity 50ml options as well as some larger capacities. Additionally, we offer precursors prepackaged into our 50ml Swagelok® cylinders. For more information visit [strem.com/cvd](http://strem.com/cvd).



## CVD/ALD precursors

Our precursor product line continues to grow. We currently offer over 450 metal precursors for CVD/ALD applications from over 60 different elements. These high quality materials have purities that range from 99% to 99.9999% metals purity.

## CVD Bubblers & ALD Cylinders



**98-0272**  
150ml, horizontal,  
high-temp valves



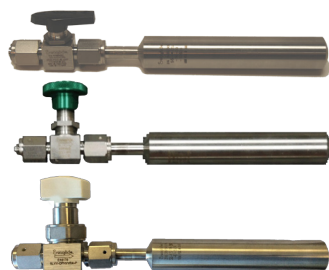
**95-0270**  
300ml, vertical,  
high-temp valves



**95-4151**  
150ml, vertical,  
PCTFE valve stem tip



**95-4157**  
200ml, vertical, high-temp  
valves, rotated handles



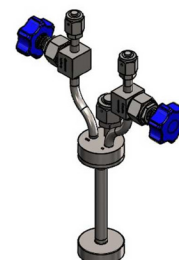
**96-1070, 96-1071 & 96-1077**  
Swagelok Cylinder Assemblies



**95-4154**  
200ml, single vertical stem,  
PCTFE valve stem tip

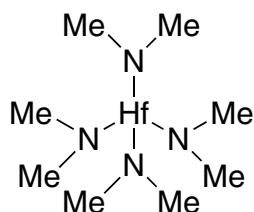


**95-0281**  
125ml, horizontal,  
angled bellows valve

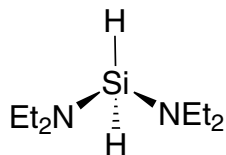


**97-7000**  
7ml, vertical, low volume,  
PCTFE valve stem tip

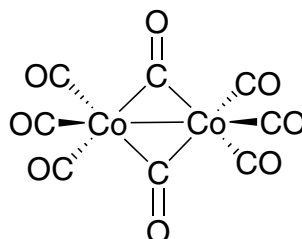
## A Variety of Precursors



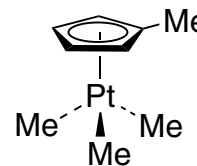
**72-8000**  
TDMAH



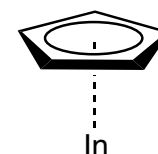
**98-8810**  
BDEAS



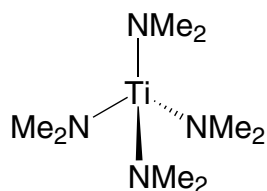
**27-0400**



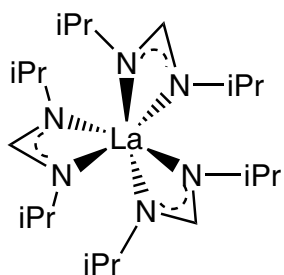
**78-1350**



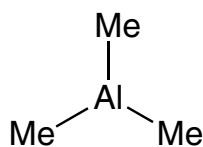
**97-3425**



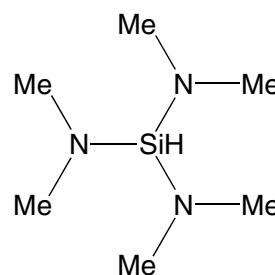
**93-2240**



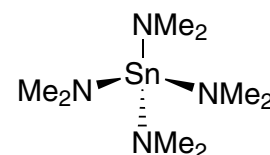
**57-1200**



**93-1360**



**14-8750**



**50-1815**