



# Trusted Solutions for Electronics Applications

Thin Film Deposition, OLED & LCD Manufacturing, and Germane & Diborane Gas Production



Ascensus offers an extensive portfolio for chemical vapor/atomic layer deposition (CVD/ALD) precursors, reagents for OLED and LCD manufacturing, and production of germane and diborane gas. Our expertise with cylinders and adapters for electronic applications plus our availability of high-quality reagents in quantities from kilograms to commercial volumes deliver unmatched service for the Electronics industry.

## Boronic acid and esters

Reagents used in aryl catalyzed reactions critical in OLED manufacturing

## CALLERY™ Boranes

Excellent reductant for electroless metal plating commonly used in printed circuit board production. Back integrated in diborane gas manufacturing and other boranes for generation of metallic films

## CALLERY Specialty Alcoholates

Specialty alcoholates are a useful reagent in the production of consumer electronic devices like flat panel displays

## VENMET™

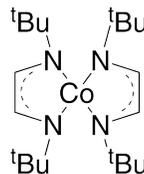
Efficiently recovers precious metals: Pt, Rh, Ru, Au, Ag, Pd, etc. for reuse or resale, including waste metals: Cu, Co, Ni, etc. to reduce effluent treatment costs

## VENPURE™

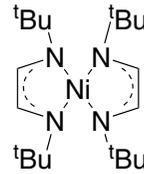
Key raw material in the production of germane gas for the chemical deposition applied to circuit boards and LED technology (i.e., lights and TVs) and the synthesis of diborane for the deposition of boron nitride for DRAM and NAND memory

## STREM™ CVD/ALD Precursors

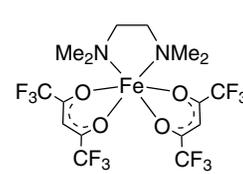
Offer a broad range of reagents for chemical vapor deposition and atomic layer deposition of cobalt-containing films, iron oxide thin films as well as metal amidinates and triflates, cyclopentadienyl complexes and other organometallics for similar CVD/ALD applications



Co(DAD)<sub>2</sub>



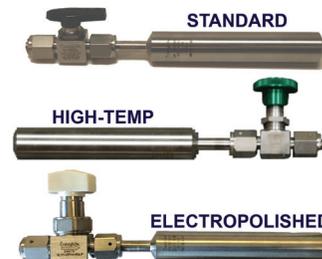
Ni(DAD)<sub>2</sub>



C<sub>16</sub>H<sub>18</sub>F<sub>12</sub>FeN<sub>2</sub>O<sub>4</sub>

## Strem Equipment

We package our high-purity metal organics in electronic grade high-quality cylinders.



ALD Cylinders & Prepackaged Chemicals



Headquartered in Bellevue, WA, **Ascensus Specialties is the global leader in catalysts, ligands, building blocks, and specialty reagents.** Our 60+ years of synthetic knowhow, allows us to bring additional value to our clients through our custom synthesis and cGMP services. From world-class production plants in Elma, WA, Evans City, PA, Newburyport, MA, and Cambridge, UK, Ascensus has a global reach that ensures our clients can consistently manufacture their products to the highest standards.

### ▶ THE ASCENSUS ADVANTAGE

60+ Years Of Experience

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Custom-Tailored Purity And Impurity Profiles

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Commercial GMP Capabilities

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Supply Chain Development

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Process Control And Robustness

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Bioburden Control

### 📄 CONTACT

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