Hexachlorodisilane (HCDS)
Ultra High Purity Grade

Product Specification Sheet

CAS #: 13465-77-5                                Formula: Si₂Cl₆
Boiling Point: 145 °C                             Density: 1.56 g/ml @ 25° C
Molecular Weight: 268.88                           Melting Point: -1° C
Vapor Pressure: 12 Torr @ 40° C                  Appearance: Clear colorless liquid

Assay (by GC)         99.9% minimum
Metals

Aluminum         0.076
Antimony         <0.018
Arsenic          0.122
Barium           <0.003
Beryllium        <0.005
Bismuth          <0.004
Boron            <0.334
Cadmium          <0.005
Calcium          <0.043
Cerium           <0.003
Chromium         0.022
Cobalt           <0.005
Copper           <0.008
Gallium          <0.004
Germanium        <0.010
Gold             <0.006
Hafnium          <0.005
Indium           <0.004
Iridium          0.006
Iron             0.538
Lead             <0.004
Lithium          <0.006
Magnesium        0.008
Manganese        <0.038
Mercury          <0.032
Molybdenum       0.071
Nickel           <0.007
Niobium          <0.003
Palladium        <0.010
Platinum <0.012
Potassium <0.072
Rhenium <0.003
Rhodium <0.002
Rubidium <0.003
Silver <0.013
Sodium <0.032
Strontium <0.004
Tantalum <0.003
Thallium <0.003
Thorium <0.004
Tin <0.033
Titanium 9.46
Tungsten <0.006
Uranium <0.004
Vanadium 0.06
Zinc <0.028
Zirconium <0.004

| Storage | Keep container tightly closed in a cool, dry, well-ventilated place. Handle and store under inert gas. Notes: Stable, but reacts violently with water. Moisture and shock sensitive. Incompatible with water, moisture, acids, strong bases, oxidizing agents, and alcohols. |
| Special Requirements | Handle and store under inert gas. Stable, but reacts violently with water. Moisture sensitive. May be shock sensitive. Incompatible with water, moisture, acids, strong bases, oxidizing agents, and alcohols. |
| Uses | HCDS can be used at relatively low temperatures; powerful deoxygenating agent; reducing agent; fiber optics, solar energy products; ALD process. |
| Transport Information | Proper Shipping Name: Chlorosilanes, Corrosive, n.o.s. (Hexachlorodisilane) |
| | UN2987 |
| | Class: 8 |
| | Hazard Label: Corrosive |
| | Packing Group: II |