



Germanium

Germanium Tetrachloride Fibre Optic Grade

Physical Data: Molecular Weight of GeCl_4 214.40
 Stoichiometric Ge Content 33.86%
 Density (25 deg. C) 1.879 kg/m^3
 Boiling Temperature 83 deg. C

Analysis:

Metallic Impurities (determined by ICP-MS)

| Element | Maximum (ppb) | Detection Limit (ppb) |
|---------|---------------|-----------------------|
| Al | 1 | 0.1 |
| As | 2 | 0.1 |
| Co | 1 | 0.1 |
| Cr | 1 | 0.1 |
| Cu | 1 | 0.1 |
| Fe | 3 | 0.1 |
| Mn | 1 | 0.1 |
| Mo | 1 | 0.1 |
| Ni | 1 | 0.1 |
| Ti | 1 | 0.1 |
| V | 1 | 0.1 |

Maximum Total Combined Metallic Impurities ≤ 10 ppb

Hydrogen Bonds (determined by FTIR Spectroscopy):

| Species | Wavenumber (cm^{-1}) | Maximum (ppm) |
|------------------|---------------------------------|---------------|
| O-H | 3615 | 1.0 |
| C-H _x | 2925 & 2964 | 4.0 |
| H-Cl | 2760 | 0.5 |

Other specifications are available on request.

Packaging: 200 litre (360 kg) stainless steel container with a Hastelloy pneumatically actuated valve manifold. Additional sizes are available on request. Containers are in accordance with UN regulations.



Teck