# HIGH PURITY CHEMICALS FOR SEMICONDUCTOR

LIQUID SOURCES

## Trans 1,2-Dichloroethylene (DCE)

| Specification: |                 | Purity (Trace Metals) 99.999995+%* |
|----------------|-----------------|------------------------------------|
| Assay          | 99.95% miniimum |                                    |
| AI             | 2 ppb maximum   |                                    |
| Ag             | 1 ppb maximum   |                                    |
| As             | 1 ppb maximum   |                                    |
| Au             | 1 ppb maximum   |                                    |
| В              | 1 ppb maximum   |                                    |
| Ва             | 1 ppb maximum   |                                    |
| Bi             | 1 ppb maximum   |                                    |
| Ca             | 2 ppb maximum   |                                    |
| Со             | 1 ppb maximum   |                                    |
| Cr             | 1 ppb maximum   |                                    |
| Cu             | 1 ppb maximum   |                                    |
| Fe             | 2 ppb maximum   |                                    |
| Ga             | 1 ppb maximum   |                                    |

|    | Rev. Date 7/92 |
|----|----------------|
| Hg | 1 ppb maximum  |
| к  | 2 ppb maximum  |
| Li | 1 ppb maximum  |
| Mg | 1 ppb maximum  |
| Mn | 1 ppb maximum  |
| Na | 2 ppb maximum  |
| Ni | 1 ppb maximum  |
| Р  | 1 ppb maximum  |
| Pb | 1 ppb maximum  |
| Sb | 1 ppb maximum  |
| Si | 1 ppb maximum  |
| Sn | 1 ppb maximum  |
| Sr | 1 ppb maximum  |
| Ti | 1 ppb maximum  |
| Zn | 1 ppb maximum  |

#### **Delivery Hardware:**

Hong Kong Specialty Gases offers our ULSI Grade DCE in industry standard quartz bubblers. High purity quartz bubbles are available in 500, 1000, and 1500cc sizes. These bubblers are offered with dual-sealing teflon valves for the inlet and outlet (1/4" or 3/8"). Our quartz bubblers come standard with a clear safety coating to protect against spillage upon breakage and are equipped with dip tubes with multiple angle laser cut holes for improved carrier gas saturation.

### **Physical Properties:**

| FORMULA          | C <sub>2</sub> Cl <sub>2</sub> H <sub>2</sub> |
|------------------|---|
| Boiling Point    | 48.0°C  |
| Melting          | -50.0°C                                       |
| Density          | 1.257 g/ml                                    |
| Vapor Density    | 3.67 (Air=1)                                  |
| Vapor Pressure   | See chart Below                               |
| Molecular Weight | 96.94   |
| Flash Point      | 43°F  |

#### Vapor Pressure:

