

Germane



| Grade | Semicon 5N |
|-----------------|------------|
| Purity, % | 99.999 |
| Oxygen+ Argon | ≤0.5 ppmv |
| Nitrogen | ≤2.0 ppmv |
| Carbon Dioxide | ≤2.0 ppmv |
| Carbon Monoxide | ≤1.0 ppmv |
| Methane | ≤1.0 ppmv |
| Water | ≤1.0 ppmv |
| Chlorogermanes | ≤5.0 ppmv |
| Digermane* | ≤20.0 ppmv |
| Germoxanes | ≤5.0 ppmv |
| Hydrogen* | ≤50.0 ppmv |
| Trigermane | ≤1.0 ppmv |

*Not included in over-all purity analysis.

- A lot analysis is provided for each order – Individual analysis is also available upon request.
- Pneumatic valves, JIS connections available upon request.

| CYLINDER | Internal Volume | Liters | 29.5 | 17.1 | 7.3 |
|----------|--------------------------------|--------|-----------|-----------|-----------|
| | Cylinder Sizes >> | | QH | GF | UF |
| | Content | kg | 1 | 0.5 | 0.1 |
| | | lbs | 2.2 | 1.1 | 0.22 |
| | Cylinder Pressure** | psig | 160 | 118 | 45 |
| atm | | 12.3 | 9.3 | 5.3 | |

** @ NTP

| SHIP | DOT Shipping Name | Germane | UN Number | UN 2192 | Shipped as |
|------|--------------------|--------------------------|--------------|--------------|----------------|
| | DOT Classification | 2.3 (Toxic Gas) | ECCN # | EAR99 | Compressed Gas |
| | DOT Label | TOXIC GAS, FLAMMABLE GAS | Harmonized # | 2851.00.0000 | |

| TECHNICAL DATA | Specific Volume | 0.32 m ³ /kg |
|----------------|------------------|-------------------------|
| | @NTP | 5.1 ft ³ /lb |
| | CAS No | 7782-65-2 |
| | CGA/DISS/JIS | 350/632/W22-14L |
| | Molecular Weight | 76.62 g/mol |

NTP = 21°C or 70°F and 101.3 kPa or 1 atm

| | | |
|----------------------|----------|------------|
| Critical Temperature | 94.7°C | 34.8°F |
| Critical Pressure | 56.6 atm | 805.3 psia |

| RFO Data | Size, mm | 0.254 | 0.3556 | 0.508 | 0.762 | 1.016 |
|----------|--------------|-------|--------|-------|-------|-------|
| | Size, inches | 0.010 | 0.014 | 0.020 | 0.030 | 0.040 |
| | Flow, sccm | 4257 | 8127 | 16769 | 37408 | 64497 |
| | Flow, scf/h | 9.0 | 17.2 | 35.5 | 79.3 | 136.7 |

| Cylinder | Treatment | Nominal Diameter (OD)xHeight* | | Material of Construction | |
|----------|-------------|-------------------------------|--------------|--------------------------|-------|
| | | cm | Inches | Cylinder | Valve |
| QH | ULTRA-LINE® | 20x122/126/135 | 8x48/49.5/53 | Aluminum | SS |
| GF | ULTRA-LINE® | 23x66/70/79 | 9x26/27.5/31 | CS | SS |
| UF | ULTRA-LINE® | 15x51/55/64 | 6x19/20.5/24 | CS | SS |

*Height is reported as the distance from the bottom of the cylinder to the cylinder neck/ center of the valve outlet/ top of the handwheel
CS: Carbon Steel SS: Stainless Steel

