

# Linde Electronics List of Gases



|  | CLEANING | DEPOSITION | DOPING | ETCH | ANNEALING | LITHOGRAPHY | PURGING |
|--|----------|------------|--------|------|-----------|-------------|---------|
| Ar (Argon)   |          |            |        |      |           |             | ●       |
| Ar/F <sub>2</sub> /Ne<br>(Argon/Fluorine/Neon - ArF laser)                 |          |            |        |      |           | ●           |         |
| Ar/Xe/Ne<br>(Argon/Xenon/Neon - ArF laser)                                 |          |            |        |      |           | ●           |         |
| AsH <sub>3</sub> (Arsine)  |          | ●          | ●      |      |           |             |         |
| BF <sub>3</sub> (Boron trifluoride)  |          |            | ●      |      |           |             |         |
| <sup>11</sup> BF <sub>3</sub> (Boron-11 trifluoride)                       |          |            | ●      |      |           |             |         |
| B <sub>2</sub> H <sub>6</sub> (Diborane)                                   |          |            | ●      |      |           |             |         |
| BCl <sub>3</sub> (Boron trichloride)                                       |          |            |        | ●    |           |             |         |
| C <sub>2</sub> F <sub>6</sub> (Hexafluoroethane)<br>Halocarbon 116         | ●        | ●          |        | ●    |           |             |         |
| C <sub>3</sub> F <sub>8</sub> (Octafluoropropane)<br>Halocarbon 218        |          |            |        | ●    |           |             |         |
| C <sub>4</sub> F <sub>6</sub> (Hexafluoro-3-butadiene)<br>Halocarbon 2316  |          |            |        | ●    |           |             |         |
| C <sub>4</sub> F <sub>8</sub> (Octofluorocyclobutane)<br>Halocarbon 318    |          |            |        | ●    |           |             |         |
| C <sub>5</sub> F <sub>8</sub> (Octofluorocyclopentene)<br>Halocarbon c1418 |          |            |        | ●    |           |             |         |
| CF <sub>4</sub> (Carbon tetrafluoride)<br>Halocarbon 14                    | ●        |            |        | ●    |           |             |         |
| CH <sub>2</sub> F <sub>2</sub> (Difluoromethane)<br>Halocarbon 32          |          |            |        | ●    |           |             |         |
| C <sub>2</sub> HF <sub>5</sub> (Pentafluoroethane)                         |          |            |        | ●    |           |             |         |
| CH <sub>3</sub> F (Fluoromethane)<br>Halocarbon 41                         |          |            |        | ●    |           |             |         |

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| CH <sub>4</sub> (Methane)                            |          | ●          |        | ●    |           |             |         |
| CHF <sub>3</sub> (Trifluoromethane)<br>Halocarbon 23 |          |            |        | ●    |           |             |         |
| Cl <sub>2</sub> (Chlorine)                           | ●        |            |        | ●    |           |             |         |
| ClF <sub>3</sub> (Chlorine trifluoride)              | ●        |            |        |      |           |             |         |
| CO (Carbon monoxide)                                 |          | ●          |        | ●    |           |             |         |
| CO <sub>2</sub> (Carbon dioxide)                     |          |            |        | ●    |           | ●           |         |
| COS (Carbonyl sulfide)                               |          | ●          |        |      |           |             |         |
| D <sub>2</sub> (Deuterium)                           |          |            |        |      | ●         |             |         |
| DEZ (Diethylzinc)                                    |          | ●          |        |      |           |             |         |
| F <sub>2</sub> (Fluorine)                            | ●        |            |        |      |           |             |         |
| F <sub>2</sub> /N <sub>2</sub> (Fluorine/Nitrogen)   | ●        |            |        |      |           |             |         |
| GeCl <sub>4</sub> (Germanium tetrachloride)          |          | ●          |        |      |           |             |         |
| GeH <sub>4</sub> (Germane)                           |          | ●          |        |      |           |             |         |
| He (Helium)  |          |            |        |      |           |             | ●       |
| H <sub>2</sub> (Hydrogen)                            |          |            |        |      | ●         | ●           | ●       |
| H <sub>2</sub> S (Hydrogen sulfide)                  |          | ●          |        |      |           |             |         |
| H <sub>2</sub> Se (Hydrogen selenide)                |          | ●          |        |      |           |             |         |
| HBr (Hydrogen bromide)                               |          |            |        | ●    |           |             |         |
| HCDS (Hexachlorodisilane)                            |          | ●          |        |      |           |             |         |

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| HCl (Hydrogen chloride)   | ●        | ●           |        | ●    |           |              |         |
| HF (Hydrogen fluoride)  |          |             |        | ●    |           |              |         |
| Kr (Krypton)  |          |             |        |      |           | ●            | ●       |
| Kr/F <sub>2</sub> /Ne<br>(Krypton/Fluorine/Neon -<br>KrF laser)                   |          |             |        |      |           | ●            |         |
| Kr/Ne (Krypton/Neon - KrF laser)  |          |             |        |      |           | ●            |         |
| N <sub>2</sub> (Nitrogen)   |          |             |        |      |           |              | ●       |
| N <sub>2</sub> O (Nitrous oxide)  |          | ●           |        | ●    |           |              |         |
| ND <sub>3</sub> (Deuterated ammonia)  |          | ●           |        |      |           |              |         |
| Ne (Neon)   |          |             |        |      |           | ●            | ●       |
| NF <sub>3</sub> (Nitrogen trifluoride)  | ●        |             |        | ●    |           |              |         |
| NH <sub>3</sub> (Ammonia)   |          | ●           |        |      |           |              |         |
| NO (Nitric oxide)   |          | ●           |        | ●    |           |              |         |
| O <sub>2</sub> (Oxygen)   | ●        | ●           |        | ●    |           |              |         |
| PH <sub>3</sub> (Phosphine)   |          | ●           | ●      |      |           |              |         |
| SF <sub>6</sub> (Sulfur hexafluoride)   | ●        |             |        | ●    |           |              |         |
| Si <sub>2</sub> Cl <sub>6</sub> (HCDS -<br>Hexachlorodisilane)                    |          | ●           |        |      |           |              |         |
| Si <sub>2</sub> H <sub>6</sub> (Disilane)   |          | ●           |        |      |           |              |         |
| SiCl <sub>4</sub> (Tetrachlorosilane –<br>also known as silicon<br>tetrachloride) |          | ●           |        |      |           |              |         |

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| SiD <sub>4</sub> (Deuterated silane)                                      |          | ●               |        |      |           |                  |         |
| SiF <sub>4</sub> (Tetrafluorosilane - also know as silicon tetrafluoride) |          | ●               |        | ●    |           |                  |         |
| SiH <sub>2</sub> Cl <sub>2</sub> (Dichlorosilane)                         |          | ●               |        |      |           |                  |         |
| SiH <sub>4</sub> (Silane)   |          | ●               |        |      |           |                  |         |
| SiHCl <sub>3</sub> (TCS - Trichlorosilane)                                |          | ●               |        |      |           |                  |         |
| SO <sub>2</sub> (Sulfur dioxide)  |          | ●               |        |      |           |                  |         |
| TMA (Trimethylaluminum)   |          | ●               |        |      |           |                  |         |
| TMB (Trimethylboron)  |          |                 | ●      |      |           |                  |         |
| TMS (3MS - Trimethylsilane)   |          | ●               |        |      |           |                  |         |
| WF <sub>6</sub> (Tungsten hexafluoride)                                   |          | ●               |        |      |           |                  |         |
| Xe (Xenon)  |          |                 |        | ●    |           | ●                | ●       |
| XeF <sub>2</sub> (Xenon difluoride)                                       |          |                 |        | ●    |           |                  |         |
| Mixtures (calibration, etc.)  |          |                 |        |      |           |                  |         |

[www.linde.com/electronics](http://www.linde.com/electronics)

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