

VACOM® Purity Classes



| | | Class S | Purity Class 1 | Purity Class 2 | Purity Class 3 | Purity Class 4 | Purity Class 5 |
|--|-----------------------------------|--|--------------------|-------------------------|---|----------------------------|----------------|
| Accumulated molecular contamination* | | g/cm^2 | < 1E-5 | < 2E-8 | < 7E-9 | < 5E-9 | < 3E-9 |
| Outgassing (after 10h) for simple geometries | Stainless steel, Titanium, Nickel | H_2O [mbar·l/(s·cm ²)] | n/s | n/s | < 2E-9 | < 4E-10 | < 2E-10 |
| | | C_xH_y (45...100) [mbar·l/(s·cm ²)] | n/s | n/s | < 5E-12 | < 4E-12 | < 2E-12 |
| | | C_xH_y (101...200) [mbar·l/(s·cm ²)] | n/s | n/s | < 6E-13 | < 3E-13 | < 1.5E-13 |
| | Aluminum, Copper | H_2O [mbar·l/(s·cm ²)] | n/s | n/s | < 2E-9 | < 1E-9 | < 5E-10 |
| | | C_xH_y (45...100) [mbar·l/(s·cm ²)] | n/s | n/s | < 7E-12 | < 6E-12 | < 3E-12 |
| | | C_xH_y (101...200) [mbar·l/(s·cm ²)] | n/s | n/s | < 6E-13 | < 4.6E-13 | < 2.3E-13 |
| RGA certificate | | no | no | optional | optional | yes | yes |
| Heavy metals | [at% at surface] | n/s | n/s | n/s | n/s | < 0.1 | < 0.1 |
| Particles ** | [Surface cleanliness class] | SCC 100 | SCC 10 | SCC 1 | SCC 1 | SCC 1 | SCC 1 |
| Recommended for use in cleanroom class*** | | - | ISO 7 | ISO 5 | ISO 5 | ISO 5 | ISO 5 |
| Cleanroom suitable packed | | no | twofold | twofold | twofold | twofold | threefold |
| Note | | "free of oil and grease" | cleanroom suitable | low particle generation | low out-gassing and low particle generation | Semiconductor Applications | the top class |

* hydrocarbons
 ** Purity Class 1 - 4: SCC 0.1 according to the customer request
 *** Cleanroom compatibility better than ISO 5 according to the customer's request
 + Optionally, customers can order a residual gas analysis with RGA protocol for various Purity Classes (PC). The selection available for this is made directly on the product via the Purity Classes filter when ordering in the shop.

The T&C of cleaning apply