



## Product data sheet. Gas mixtures.

Linde HiQ® specialty gases portfolio

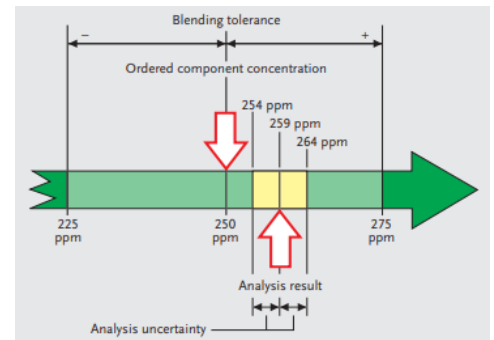
### Description

A specialty gas mixture consists of the following:

- Balance gas (e.g. nitrogen)
- A number of components (e.g. 250 ppm helium)
- Blending tolerance for the components (e.g.  $\pm 10\%$ )
- Analysis uncertainty for the components (e.g.  $\pm 2\%$ )
- Certificate – if any (e.g. Certificate of Analysis)

Other:

- Cylinder size (e.g. 10 liter)
- Demand for analysis of specific impurities
- According to specific standards/accreditations



Blending tolerance is the maximum difference between the ordered concentration and the delivered mixture - normally given as percentage relative to the component. A blending tolerance of 10% for a gas mixture with the concentration 250 ppm, means that the mixture will contain 250 ppm  $\pm 10\%$  of the component. This means a true concentration between 225 ppm and 275 ppm.

Analysis uncertainty is the maximum difference between the analysis result and the true concentration - given as percentage relative to the analyzed component concentration, which means that 2% analysis uncertainty applied to the example above, will give analysis result 259 ppm  $\pm 2\%$ , meaning a true concentration of 254–264 ppm.

### Features

Cylinder color: DIN EN 1089-3 standard

- Shoulder color according to the DIN EN 1089-3 standard, Shoulder color according to properties of the gas mixture (inert, flammable, toxic etc.)
- Cylinder body color is typically silver grey for specialty gas mixtures (not regulated by standards).

### Characteristics

Filling pressure: Typically, 150 bar unless limited by characteristics of components (components liquifying under pressure etc.). Concentration units based typically on molar or weight units. Other concentration bases such as, volume units on request.

### Safety

For all safety related topics including handling, transport and recommended use please see Safety Data Sheets

Sweden: [https://www.linde-gas.se/sv/safety\\_health\\_ren/safety\\_datasheets/index.html](https://www.linde-gas.se/sv/safety_health_ren/safety_datasheets/index.html)

Norway: [https://www.linde-gas.no/no/safety\\_health\\_ren/safety\\_datasheets/index.html](https://www.linde-gas.no/no/safety_health_ren/safety_datasheets/index.html)

Finland: [https://www.linde-gas.fi/fi/safety\\_health\\_ren/safety\\_datasheets/index.html](https://www.linde-gas.fi/fi/safety_health_ren/safety_datasheets/index.html)

Denmark: [https://www.linde-gas.dk/da/safety\\_health\\_ren/safety\\_datasheets/index.html](https://www.linde-gas.dk/da/safety_health_ren/safety_datasheets/index.html)

Iceland: [https://www.linde-gas.is/is/safety\\_health\\_ren/safety\\_datasheets/index.html](https://www.linde-gas.is/is/safety_health_ren/safety_datasheets/index.html)

Latvia: [https://www.linde-gas.lv/lv/safety\\_health\\_ren/safety\\_datasheets/index.html](https://www.linde-gas.lv/lv/safety_health_ren/safety_datasheets/index.html)

Lithuania: [https://www.linde-gas.lt/lt/safety\\_health\\_ren/safety\\_datasheets/index.html](https://www.linde-gas.lt/lt/safety_health_ren/safety_datasheets/index.html)

Estonia: [https://www.linde-gas.ee/et/safety\\_health\\_ren/safety\\_datasheets/index.html](https://www.linde-gas.ee/et/safety_health_ren/safety_datasheets/index.html)

Safety Data Sheets are available through your local Linde homepage in both local language and English.



Linde Northern Europe, [www.linde-gas.com](http://www.linde-gas.com)

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