



Biogas analysis

- Calculation of combustion engineering parameters
- Analysis of biogas composition

Optimization requires knowledge of gas quality

Good knowledge of actual gas quality is essential for optimum utilisation of biogas. DGC offers the required composition analysis of the biogas.

DGC offers the following packages of biogas analysis:

Package no. 1 - Determination of calorific value of biogas or natural gas

- Composition analysis (hydrocarbons, CO₂, O₂, N₂ etc.).
- Calculation of calorific values (net, gross), Wobbe index, density, compressibility factor and methane number.

Package no. 2 - Biogas analysis - silicon compounds

- Composition analysis (hydrocarbons, CO₂, O₂, N₂ etc.).
- Calculation of calorific values (net, gross), Wobbe index, density, compressibility factor and methane number.
- Analysis of organic silicon compounds, cf. the list overleaf.
- Analysis of hydrogen sulphide, H₂S.

Package no. 3 - Biogas analysis - all-inclusive analysis

- Composition analysis (hydrocarbons, CO₂, O₂, N₂ etc.).
- Calculation of calorific values (net, gross), Wobbe index, density, compressibility factor and methane number.
- Analysis of all components, cf. the list overleaf.

O ₂	%-vol
N ₂	%-vol
CH ₄	%-vol
CO ₂	%-vol
F12	mg/m ³ n
F11	mg/m ³ n
F113	mg/m ³ n
1,1,1 - Trichloroethane	mg/m ³ n
Trichloroethylene	mg/m ³ n
Tetrachloroethylene	mg/m ³ n
Vinyl chloride	mg/m ³ n
1,1 - Dichloroethylene	mg/m ³ n
cis 1,2 - Dichloroethylene	mg/m ³ n
trans 1,2 - Dichloroethylene	mg/m ³ n
Dichloromethane	mg/m ³ n
Trichloromethane	mg/m ³ n
Tetrachloromethane	mg/m ³ n
Methyl chloride	mg/m ³ n
1,1 - Dichloroethane	mg/m ³ n
1,2 - Dichloroethane	mg/m ³ n
Total, Chloride	mg/m ³ n
Total, Fluoride	mg/m ³ n
Benzene	mg/m ³ n
Toluene	mg/m ³ n
Ethylbenzene	mg/m ³ n
m/p - Xylene	mg/m ³ n

o - Xylene	mg/m ³ n
Cumene	mg/m ³ n
Propylbenzene	mg/m ³ n
Mesitylene	mg/m ³ n
1,2,4 - Trimethylbenzene	mg/m ³ n
1,2,3 - Trimethylbenzene	mg/m ³ n
Hydrogen sulphide, H ₂ S	mg/m ³ n
Organic silicon compounds	
Tetramethylsilane	mg/m ³ n
Trimethylsilanol	mg/m ³ n
Hexamethyldisiloxane	mg/m ³ n
Hexamethylcyclotrisiloxane	mg/m ³ n
Octamethyltrisiloxane	mg/m ³ n
Octamethylcyclotetrasiloxane	mg/m ³ n
Decamethyltetrasiloxane	mg/m ³ n
Decamethylcyclopentasiloxane	mg/m ³ n
Total, organic Si compounds	mg/m ³ n
Total, Si*	mg/m ³ n

*calculated by means of analysis of individual compounds

Analysis of other components can be made as per agreement.

Contact us

If you have any questions to the subjects described on the product sheet or other DGC services, you are welcome to contact us:

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Company profile

DGC is a consultancy and development company in the fields of energy and the environment. DGC's main focus area is gas and gas utilisation.

DGC offers analyses, measurement assignments, laboratory tests, verifications, training and certification for the gas industry, energy companies, suppliers, public authorities and consultants. Read more at www.dgc.eu.