



14.11.2025

#	Compound name	Formula	CAS number	Range	Unit
Main components					
1	Water	H ₂ O	7732-18-5	20	vol-%
2	Carbon dioxide	CO ₂	124-38-9	30	vol-%
3	Carbon monoxide	CO	630-08-0	300000	ppm
4	Hydrogen fluoride	HF	7664-39-3	500	ppm
5	Dimethyl carbonate	C ₃ H ₆ O ₃	616-38-6	20000	ppm
6	Ethyl methyl carbonate	C ₄ H ₈ O ₃	623-53-0	10000	ppm
7	Ethylene carbonate	C ₃ H ₄ O ₃	96-49-1	10000	ppm
8	Diethyl carbonate	C ₅ H ₁₀ O ₃	105-58-8	10000	ppm
9	Methane	CH ₄	74-82-8	50000	ppm
10	Hydrogen cyanide	HCN	74-90-8	500	ppm
11	Acetylene (Ethyne)	C ₂ H ₂	74-86-2	500	ppm
12	Ethylene (Ethene)	C ₂ H ₄	74-85-1	5000	ppm
Common components (not always present)					
13	Propylene carbonate	C ₄ H ₆ O ₃	108-32-7	5000	ppm
14	Hydrogen chloride	HCl	7647-01-0	500	ppm
15	Formaldehyde	CH ₂ O	50-00-0	200	ppm
16	Acetaldehyde	C ₂ H ₄ O	75-07-0	200	ppm
17	Ethane	C ₂ H ₆	74-84-0	200	ppm
18	Propene	C ₃ H ₆	115-07-1	500	ppm
19	Propane	C ₃ H ₈	74-98-6	200	ppm
20	Hexane	C ₆ H ₁₄	110-54-3	100	ppm
21	Methanol	CH ₄ O	67-56-1	500	ppm
22	Ethanol	C ₂ H ₆ O	64-17-5	200	ppm
23	Benzene	C ₆ H ₆	71-43-2	200	ppm
24	Toluene	C ₇ H ₈	108-88-3	200	ppm
25	Styrene	C ₈ H ₈	100-42-5	500	ppm
26	Decane	C ₁₀ H ₂₂	124-18-5	200	ppm
27	Acetic acid	C ₂ H ₄ O ₂	64-19-7	200	ppm
28	Sulfur dioxide	SO ₂	7446-09-5	2000	ppm
29	Ammonia	NH ₃	7664-41-7	500	ppm
Additional components (inclusion in the analysis optional)					
30	HFO-1234yf	C ₃ H ₂ F ₄	754-12-1	200	ppm
31	Nitrogen monoxide	NO	10102-43-9	1000	ppm
32	Nitrogen dioxide	NO ₂	10102-44-0	500	ppm
33	Vinylene carbonate	C ₃ H ₂ O ₃	872-36-6	500	ppm
34	Nitrous oxide	N ₂ O	10024-97-2	500	ppm
35	Carbonyl sulphide	COS	463-58-1	200	ppm

Restrictions and limitations

Many components are not always present and may be temporarily higher than their measurement range.

When carbonates, methane, and/or ethylene are at high concentrations, analysis of components 13 - 33 will be indicative only or fully impossible.

Analysis of components 34 - 35 is similarly affected by percent-level CO.

GAS-LIB-BTRY is fixed application package, no modifications for compounds or ranges.