

The main activity of our laboratory is the production of mixtures that respond to the specific requirements of multiple industrial sectors and highly customized mixtures based on specific customer requests.

Among our offerings, the TO-15 Calibration Standard includes 65 components at standard concentration of (1) ppm in VOC-free nitrogen (N₂), with other concentrations available as custom mixtures. In addition, we provide TO-14A and BTEX gas standards, designed to meet advanced analytical requirements and specific customer specifications.

Component [CAS number]

Acetone [67-64-1]	Halocarbon 11 (Trichlorofluoromethane) [75-69-4]
Acrolein [107-02-8]	Halocarbon 12 (Dichlorodifluoromethane) [75-71-8]
Benzene [71-43-2]	Halocarbon 113(1,1,2-Trichlorotrifluoroethane) [76-13-1]
Benzyl Chloride [100-44-7]	Halocarbon 114 (1,2-Dichlorotetrafluoroethane) [76-14-2]
Bromoform [75-25-2]	Heptane [142-82-5]
Bromomethane [74-83-9]	Hexachloro-1,3-butadiene [87-68-3]
Bromodichloromethane [75-27-4]	Hexane [110-54-3]
1,3-Butadiene [106-99-0]	2-Hexanone (MBK) [591-78-6]
2-Butanone (MEK) [78-93-3]	4-Methyl-2-Pentanone (MIBK) [108-10-1]
Carbon Disulfide [75-15-0]	Methylene Chloride [75-09-2]
Carbon Tetrachloride [56-23-5]	Methyl methacrylate [80-62-6]
Chlorobenzene [108-90-7]	Methyl-tert-Butylether (MTBE) [1634-04-4]
Chlorethane [75-00-3]	Naphthalene [91-20-3]
Chloroform [67-66-3]	2-Propanol [67-63-0]
Cyclohexane [110-82-7]	Propylene [115-07-1]
Chloromethane [74-87-3]	Styrene [100-42-5]
Dibromochloromethane [124-48-1]	1,1,2,2-Tetrachloroethane [79-34-5]
1,2-Dichlorobenzene [95-50-1]	Tetrachloroethene [127-18-4]
1,3-Dichlorobenzene [541-73-1]	Tetrahydrofuran [109-99-9]
1,4-Dichlorobenzene [106-46-7]	Toluene [108-88-3]
1,1-Dichloroethane [75-34-3]	1,1,1-Trichloroethane [71-55-6]
1,2-Dichloroethane [107-06-2]	1,1,2-Trichloroethane [79-00-5]
1,1-Dichlorethene [75-35-4]	Trichloroethene [79-01-6]
cis-1,2-Dichloroethene [156-59-2]	1,2,4-Trichlorobenzene [120-82-1]
trans-1,2-Dichloroethene [156-60-5]	1,2,4-Trimethylbenzene [95-63-6]
1,2-Dichloropropane [78-87-5]	1,3,5-Trimethylbenzene [108-67-8]
cis-1,3-Dichloropropene [10061-01-5]	Vinyl Acetate [108-05-4]
trans-1,3-Dichloropropene [10061-02-6]	Vinyl Chloride [75-01-4]
1,4-Dioxane [123-91-1]	o-Xylene [95-47-6]
Ethanol [64-17-5]	m-Xylene [108-38-3]
Ethyl Acetate [141-78-6]	p-Xylene [106-42-3]
Ethyl Benzene [100-41-4]	
1,2 Dibromoethane [106-93-4]	
4-Ethyltoluene [622-96-8]	

PFAS Standard - EPA OTM 50

SIAD is able to produce mixtures containing volatile PFAS according to EPA OTM-50.

Component [CAS number]

1H-Heptafluoropropane [2252-84-8]	1,1,1-Trifluoroethane [420-46-2]
1H-Nonafluorobutane [375-17-7]	Carbon tetrafluoride [75-73-0]
Heptafluoropropyl-1,2,2,2-tetrafluoroethyl ether [3330-15-2]	Tetrafluoroethene [116-14-3]
2H-Perfluoro-5-methyl-3,6-dioxanonane [3330-14-1]	Octafluoropropane [76-19-7]
Dodecafluoropentane [678-26-2]	Octafluorocyclobutane [115-25-3]
Octafluorocyclopentene [559-40-0]	Hexafluoropropene [116-15-4]
Hexafluoropropene oxide [428-59-1]	Hexafluoroethane [76-16-4]
1H-Perfluoroheptane [375-83-7]	Fluoromethane [593-53-3]
1H-Perfluoropentane 375-61-1	Chlorodifluoromethane [75-45-6]
Decafluorobutane [355-25-9]	Octadecafluorooctane [307-34-6]
1H-Perfluorohexane [355-37-3]	Pentafluoroethane [354-33-6]
1H-Perfluorooctane [335-65-9]	Tetradecafluorohexane [355-42-0]
Hexadecafluoroheptane [335-57-9]	Difluoromethane [75-10-5]
	1,1,1,2-Tetrafluoroethane [811-97-2]
	Trichloromonofluoromethane [75-72-9]

Breath analysis standards

SIAD is able to produce mixtures for breath analysis from 1 ppm to 10 ppbmol of different compounds, also in their deuterated form.

Component [CAS number]

Toluene-d8 [2037-26-5]	Acrolein [107-02-8]
Dichlorobenzene-d4 [3855-82-1]	Acrylonitrile [107-13-1]
Decane-d22 [16416-29-8]	Benzene [71-43-2]
Acetophenone-d5 [28077-64-7]	Butyl Acetate [123-86-4]
Ethyl acetate-d8 [117121-81-0]	Cyclohexene [110-83-8]
Hexanal-d12 [1219803-74-3]	1,1-Dichloroethylene [75-35-4]
Naphthalene-d8 [1146-65-2]	Diethyl Ether [60-29-7]
Styrene-d8 [19361-62-7]	Ethyl Acetate [141-78-6]
Styrene [100-42-5]	Fluorobenzene [462-06-6]
Toluene [108-88-3]	1-Heptene [592-76-7]
(R)-Limonene [5989-27-5]	Isoamyl Acetate [123-92-2]
Perfluoro-2-methyl-3-pentanone [756-13-8]	

Fuel cell standards ISO 14687:2025 - Hydrogen fuel quality

SIAD has already produced mixture to calibrate instruments to measure impurities of hydrogen according to ISO 14687:2025

Component	Concentration [mol/mol]
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Propane	$2 \cdot 10^{-6}$
Methane	$100 \cdot 10^{-6}$
Oxygen	$5 \cdot 10^{-6}$
Helium	$300 \cdot 10^{-6}$
Argon	$300 \cdot 10^{-6}$
Carbon dioxide	$2 \cdot 10^{-6}$
Carbon monoxide	$0,2 \cdot 10^{-6}$
Carbonyl sulphide	$0,05 \cdot 10^{-6}$
Ammonia	$1 \cdot 10^{-6}$
Freon-113	$0,05 \cdot 10^{-6}$
1-2 Dibromomethane	$0,05 \cdot 10^{-6}$
1-2 Dichloroethane	$0,05 \cdot 10^{-6}$
Trichloroethene	$0,05 \cdot 10^{-6}$
Formaldehyde*	$0,1 \cdot 10^{-6}$
Formic Acid*	$0,2 \cdot 10^{-6}$
Hydrogen	Balance

*Only in binary mixture

Further gas mixtures with specific components and composition are available on request.

Send us a request

