

VOC – Analysis Arium® Mini Essential Extend

Sample	Detection Threshold	Detected Concentration	Unit	Method
1, 1 Dichloropropene	0.3	Under detection threshold	µg/L (ppb)	HS-GC/MS
1, 1 Dichlorethane	0.1	Under detection threshold	µg/L (ppb)	HS-GC/MS
1, 1 Dichlorethene	0.2	Under detection threshold	µg/L (ppb)	HS-GC/MS
1, 1, 1, 2 Tetrachlorethane	0.1	Under detection threshold	µg/L (ppb)	HS-GC/MS
1, 1, 1, 2, 2 Tetrachlorethane	0.2	Under detection threshold	µg/L (ppb)	HS-GC/MS
1, 1, 1, Trichlorethane	0.25	Under detection threshold	µg/L (ppb)	HS-GC/MS
1, 1, 2 Trichlorethane	0.1	Under detection threshold	µg/L (ppb)	HS-GC/MS
1, 2 Dibromo-3-chloropropane (DBCP)	0.5	Under detection threshold	µg/L (ppb)	HS-GC/MS
1, 2 Dibromoethane	0.3	Under detection threshold	µg/L (ppb)	HS-GC/MS
1, 2 Dichlorethane	0.4	Under detection threshold	µg/L (ppb)	HS-GC/MS
1, 2 Dichlorobenzene	0.1	Under detection threshold	µg/L (ppb)	HS-GC/MS
1, 2 Dichloropropane	0.5	Under detection threshold	µg/L (ppb)	HS-GC/MS
1, 2, 3 Trichlorobenzene	0.05	Under detection threshold	µg/L (ppb)	HS-GC/MS
1, 2, 3 Trichloropropane	0.2	Under detection threshold	µg/L (ppb)	HS-GC/MS
1, 2, 4 Trichlorobenzene	0.05	Under detection threshold	µg/L (ppb)	HS-GC/MS
1, 2, 4 Trimethylbenzene	0.1	Under detection threshold	µg/L (ppb)	HS-GC/MS
1, 3 Dichlorobenzene	0.1	Under detection threshold	µg/L (ppb)	HS-GC/MS
1, 3 Dichloropropane	0.2	Under detection threshold	µg/L (ppb)	HS-GC/MS
1, 3, 5 Trimethylbenzene	0.1	Under detection threshold	µg/L (ppb)	HS-GC/MS
1, 4 Dichlorobenzene	0.1	Under detection threshold	µg/L (ppb)	HS-GC/MS
2 Chlorotoluene	0.2	Under detection threshold	µg/L (ppb)	HS-GC/MS
2, 2 Dichloropropane	0.4	Under detection threshold	µg/L (ppb)	HS-GC/MS
4 Chlorotoluene	0.2	Under detection threshold	µg/L (ppb)	HS-GC/MS
4 Isopropyltoluene	0.05	Under detection threshold	µg/L (ppb)	HS-GC/MS
Benzene	0.1	Under detection threshold	µg/L (ppb)	HS-GC/MS
Bromobenzene	0.2	Under detection threshold	µg/L (ppb)	HS-GC/MS
Bromochloromethane	0.4	Under detection threshold	µg/L (ppb)	HS-GC/MS
Bromodichloromethane	0.2	Under detection threshold	µg/L (ppb)	HS-GC/MS
Bromoform	0.5	Under detection threshold	µg/L (ppb)	HS-GC/MS
Bromomethane	0.25	Under detection threshold	µg/L (ppb)	HS-GC/MS
Chlorobenzene	0.1	Under detection threshold	µg/L (ppb)	HS-GC/MS
Chloroethane	0.25	Under detection threshold	µg/L (ppb)	HS-GC/MS
Chloroform	0.5	Under detection threshold	µg/L (ppb)	HS-GC/MS

Execution and Analysis Procedure

The water analysis was executed by TÜV Rheinland Energy GmbH, an internationally recognized testing laboratory for special analytics, based on following measurement methods: HS-GC/MS, GC/MS. The methods have been partially validated. The tests were performed with the Arium® Mini Essential Extend, without final filter, fed with DI water.

Sample	Detection Threshold	Detected Concentration	Unit	Method
cis-1,2-Dichloroethene	0.1	Under detection threshold	µg/L (ppb)	HS-GC/MS
cis-1,3-Dichloropropene	0.3	Under detection threshold	µg/L (ppb)	HS-GC/MS
Dibromochloromethane	0.5	Under detection threshold	µg/L (ppb)	HS-GC/MS
Dibromomethane	0.25	Under detection threshold	µg/L (ppb)	HS-GC/MS
Dichloromethane	0.1	Under detection threshold	µg/L (ppb)	HS-GC/MS
Ethylbenzene	0.1	Under detection threshold	µg/L (ppb)	HS-GC/MS
Hexachlorobutadiene	0.005	0.010	µg/L (ppb)	GC/MS
Isopropylbenzene	0.1	Under detection threshold	µg/L (ppb)	HS-GC/MS
m-Xylene	0.1	Under detection threshold	µg/L (ppb)	HS-GC/MS
Naphthaline	0.1	Under detection threshold	µg/L (ppb)	HS-GC/MS
n-Butylbenzene	0.1	Under detection threshold	µg/L (ppb)	HS-GC/MS
n-Propylbenzene	0.1	Under detection threshold	µg/L (ppb)	HS-GC/MS
o-Xylene	0.1	Under detection threshold	µg/L (ppb)	HS-GC/MS
p-Xylene	0.1	Under detection threshold	µg/L (ppb)	HS-GC/MS
sec-Butylbenzene	0.05	Under detection threshold	µg/L (ppb)	HS-GC/MS
Styrene	0.1	Under detection threshold	µg/L (ppb)	HS-GC/MS
tert-Butylbenzene	0.05	Under detection threshold	µg/L (ppb)	HS-GC/MS
Tetrachloroethene	0.1	Under detection threshold	µg/L (ppb)	HS-GC/MS
Tetrachloromethane	0.4	Under detection threshold	µg/L (ppb)	HS-GC/MS
Toluene	0.1	Under detection threshold	µg/L (ppb)	HS-GC/MS
trans-1,2-Dichloroethene	0.1	Under detection threshold	µg/L (ppb)	HS-GC/MS
trans-1,3-Dichloropropene	0.5	Under detection threshold	µg/L (ppb)	HS-GC/MS
Trichloroethene	0.2	Under detection threshold	µg/L (ppb)	HS-GC/MS
Trichlorofluoromethane	0.2	Under detection threshold	µg/L (ppb)	HS-GC/MS
Vinyl chloride	0.1	Under detection threshold	µg/L (ppb)	HS-GC/MS

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