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Supplement of

Measurement of interferences associated with the detection of the hydroperoxy radical in the atmosphere using laser-induced fluorescence

Michelle M. Lew et al.

Correspondence to: Philip S. Stevens (pstevens@indiana.edu)

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Table S1: Gas-phase compounds used in the RO₂ to HO₂ interference experiments

Compound	Company	Conc.	Conc. Cert.	Balance Gas	Blend Tolerance	Certified Accuracy
Isoprene	Matheson	100 ppm	99 ppm	N ₂	10 %	2 %
Tetramethyl ethylene	Matheson	15 ppm	17.4 ppm	N ₂	20 %	5 %
trans-2-butene	Matheson	30 ppm	30.2 ppm	N ₂	20 %	5 %
Ethylene	Matheson	150 ppm	--	N ₂	--	--
Ethane	Matheson	1200 ppm	1201 ppm	N ₂	10 %	2 %
Propane	Matheson	1200 ppm	--	N ₂	--	--
Butane	Matheson	650 ppm	650 ppm	N ₂	10 %	2 %

Table S2: Liquid-phase compounds used in the RO₂ to HO₂ interference experiments.

Compound	Company	Purity
3-buten-2-one (MVK)	Sigma-Aldrich	99%
Methacrolein (MACR)	Aldrich	95%
2-butanone (MEK)	Sigma-Aldrich	99%
n-octane	TCI-EP	97%
Toluene	Macron Chemicals	99.5%