

Supplement Materials for

**The Formation of Haloacetamides, an Emerging Class of N-DBPs from
Chlor(am)ination Algal Organic Matter Extracted from *Microcystis aeruginosa*,
Scenedesmusquadricauda and *Nitzschia palea***

Ni Zhang ¹, Chao Liu ², Fei Qi ^{1*}, Bingbing Xu ^{3**}

¹ Beijing Key Lab for Source Control Technology of Water Pollution, College of Environmental Science and Engineering, Beijing Forestry University, Beijing 100083, PR China

² Beijing Water Science Technology Institute, Beijing, 100048, P.R. China

³ State Key Laboratory of Environmental Criteria and Risk Assessment, Chinese Research Academy of Environmental Sciences, Beijing 100012, PR China

Corresponding Author, Prof. Fei Qi

Tel.: +86 10 62336615; Fax: +86 10 62336596; qifei@bjfu.edu.cn

Co-corresponding Author, Dr. Bingbing Xu

xbb_hit@126.com

Table S1 The component of BG-11 culture medium

Chemical Name	Chemical Formula	Concentration (mg/L)
Sodium nitrate	NaNO ₃	100.0
Sodium carbonate	Na ₂ CO ₃	20.0
Magnesium sulfate	MgSO ₄ ·7H ₂ O	75.0
Potassium Phosphate Monobasic	KH ₂ PO ₄	10.0
Calcium Chloride Dihydrate	CaCl ₂ ·2H ₂ O	40.0
EDTA	Na ₂ EDTA·2H ₂ O	1.0
Fe(III)-citrate complex	C ₆ H ₅ FeO ₇	6.0

Table S2 The component of D-11 culture medium

Chemical Name	Chemical Formula	Requirements	
Sodium nitrate	NaNO_3	30 g	
Dipotassium hydrogen phosphate trihydrate	$\text{K}_2\text{HPO}_4 \cdot 3\text{H}_2\text{O}$	10 g	
Magnesium sulfate	$\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$	17.5 g	
Potassium Phosphate Monobasic	KH_2PO_4	20 g	
Calcium Chloride Dihydrate	$\text{CaCl}_2 \cdot 2\text{H}_2\text{O}$	5 g	
Sodium silicate	$\text{Na}_2\text{SiO}_3 \cdot 9\text{H}_2\text{O}$	25 g	
Sodium chloride	NaCl	2.5 g	
Manganese(II) sulfate tetrahydrate	$\text{MnSO}_4 \cdot 4\text{H}_2\text{O}$	0.05 g	
Fe(III)-citrate complex	$\text{C}_6\text{H}_5\text{FeO}_7$	1.25 g	
A5	Orthoboric acid	H_3BO_3	715 mg
solution	Manganese(II) sulfate tetrahydrate	$\text{MnSO}_4 \cdot 4\text{H}_2\text{O}$	452.5 mg
	Zinc sulfate heptahydrate	$\text{ZnSO}_4 \cdot 7\text{H}_2\text{O}$	55 mg
	Copper sulfate pentahydrate	$\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$	19.75 mg
	Ammonium molybdate tetrahydrate	$(\text{NH}_4)_6\text{Mo}_7\text{O}_{24} \cdot 4\text{H}_2\text{O}$	9.75 mg

Table S3 GC analysis retention time of Cl-HAcAm and QA/QC

Cl-HAcAm Name	Retention time (min)	The minimum detection limit (MDL, µg/L)	Recovery efficiency (%)
Chloroacetamide (CAcAm)	14.464	3.5	94.6
Dichloroacetamide (DCAcAm)	17.003	2.7	98.3
Trichloroacetamide (TCAcAm)	17.955	0.07	87.7