

## Allen

(NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub>	132 mg
KH <sub>2</sub> PO <sub>4</sub>	27.2 mg
MgSO <sub>4</sub> · 7H <sub>2</sub> O	24.6 mg
CaCl <sub>2</sub> · 2H <sub>2</sub> O	7.4 mg
Allen metals	0.01 mL
Distilled water	99.9 mL
pH 2.5 <sup>1)</sup>	

1) pH is adjusted to 2.5 with 0.5mol/L H<sub>2</sub>SO<sub>4</sub>.

### Reference

Allen, M. B. 1959 Studies with *Cyanidium caldarium*, an anomalously pigmented chlorophyte. *Arch. Mikrobiol.*, **32**, 270-277.

Starr, R. C., Zeikus, J. A. 1987 UTEX - The culture collection of algae at the University of Texas at Austin. *J. Phycol.*, **23**, *Suppl. to Sept.*, 1-106.

### Allen metals

Fe-EDTA	30.16 g
MnCl <sub>2</sub> · 4H <sub>2</sub> O	1.79 g
H <sub>3</sub> BO <sub>3</sub>	2.86 g
ZnSO <sub>4</sub> · 7H <sub>2</sub> O	220 mg
CuSO <sub>4</sub> · 5H <sub>2</sub> O	79 mg
(NH <sub>4</sub> ) <sub>6</sub> Mo <sub>7</sub> O <sub>24</sub> · 4H <sub>2</sub> O	130 mg
NH <sub>4</sub> VO <sub>3</sub>	23 mg
Distilled water	100 mL

In the NIES-Collection, Allen metals are used after dilution with distilled water to 1/1,000.

### Reference

Allen, M. B. 1959 Studies with *Cyanidium caldarium*, an anomalously pigmented chlorophyte. *Arch. Mikrobiol.*, **32**, 270-277.