

# METHOD STATEMENT



## **Determinand:**

Crustacean toxicity tests

## **Matrix:**

Sample Type: chemicals, solid waste elutriates or effluents released in freshwater, estuarine or marine environments.

## **Principle of Method:**

A ½ hour, 2 hour and 24-hour LC<sub>50</sub> bioassay is performed in a multiwell test plate using instar II-III larvae of the fairy shrimp *Thamnocephalus platyurus*, which are hatched from cysts.

## **Sampling and Sample Preparation:**

A minimum of 100ml of sample is required, normal a 1 litre volume of sample will be provided. Sample provided should already be de-chlorinated. If a chlorinated sample is provided, the sample cannot be analysed due to the toxic effects of chlorine on the bacterium. Sample toxicity may also be adversely affected by storage; ideally the sample should be analysed within 96 hours of sampling.

## **Interferences**

Highly coloured and turbid samples may not suitable for this method as they may interfere with reading of the test plate

## **Performance of Method:**

### **Range of Application:**

The results are reported as LC<sub>50</sub>  
Results should be reported according to guidance of this method.

### **Limit of Detection:**

The limit of detection has not been calculated for this method

### **Uncertainty of measurement:**

The uncertainty of measurement cannot be calculated for this method

## **References:**

Thamnotoxkit F™ Crustacean Toxicity Screening Test for Freshwater, standard operating procedure. MicroBio Tests Inc.

Farokh J. Master (2003). [Diseases of Skin](#). New Delhi: B Jain Pub Pvt Ltd. p. 223.

["Potassium dichromate MSDS"](#). JT Baker.