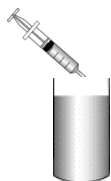


# BRONOPOL

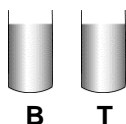
(2-bromo-2-nitropropane-1,3-diol)

This test is suitable for the determination of Bronopol (2-bromo-2-nitropropane-1,3-diol) in industrial water systems. Bronopol is used as a non-oxidising biocide to control bacteria in open systems, often in combination with a second biocide. Bronopol hydrolyses rapidly in alkaline conditions to bromo-nitro ethanol. This test will detect the proportions of both compounds present in the sample.



**1**

Using the **20 ml** syringe transfer **10 ml of sample** to the empty sample bottle. Add to this a further **25 ml of tap water** using the same syringe and mix well.



**2**

Transfer **10 ml of the diluted sample** to the amber glass bottles marked **B & T**.



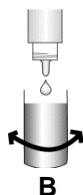
**3**

Add **0.5 ml (12 drops)** of **B2** to the bottle marked **B**. This is now the **BLANK**.



**4**

Add **0.5 ml (12 drops)** of **B1** to the bottle marked **T**. Mix and this is now the **TEST** sample.



**5**

Add **0.5 ml (12 drops)** of **B1** to the bottle marked **B** and mix.

**WAIT FOR THREE MINUTES**



# BRONOPOL

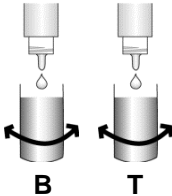
(2-bromo-2-nitropropane-1,3-diol)



**6**

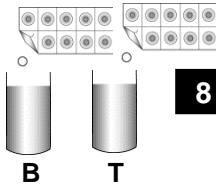
Add **0.5 ml (12 drops)** of **B2** to the bottle marked **T** and mix.

**WAIT ONE MINUTE**



**7**

Add **2 drops** of **B3** to each bottle **B & T** and mix.



**8**

Add **1 B tablet** to each bottle **B & T**. Crush the tablets and mix to dissolve, starting with the tablet in bottle **T**. (alternatively add 1 scoop of Reagent B Powder)



**9**

After **1 minute**, add **15 drops** of reagent **B4** to the bottle marked **T**. Mix and immediately add **1 drop** of reagent **B5**. Mix thoroughly.

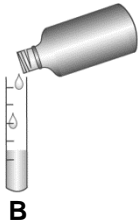


**10**

Repeat **Step 9**, on the bottle marked **B**.

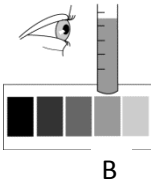
# BRONOPOL

(2-bromo-2-nitropropane-1,3-diol)



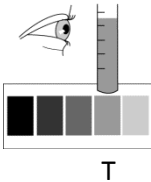
**11**

Transfer the contents of bottle **B** to one of the plastic cells.



**12**

Place over the colour card and move it along the row until a colour match is obtained **by looking across the tube** and read the figure from the scale. **This will give (Reading 1).**



**13**

Repeat steps 11+12 with the contents of bottle **T**. **This will give (Reading 2).**

## Calculation:

**Bronopol ppm (mg/l) = Reading 2 – Reading 1**

## Note:

### Reading 2

Is the concentration of bronopol and bromo-nitro ethanol present in the sample.

### Reading 1

Is the concentration of bromo-nitro ethanol present in the sample.

# BRONOPOL

(2-bromo-2-nitropropane-1,3-diol)  
Colour Chart

	50	<b>Bronopol mg/l (ppm)</b>
	40	
	30	
	25	
	20	
	15	
	10	
	5	
	0	