



# 1200 COLORIMETER

## BROMINE

### DPD TABLET METHOD

#### MODEL 1200-BR • CODE 3672-01

QUANTITY	CONTENTS	CODE
100	*Chlorine DPD #1 Tablets (Instrument Grade)	*6903-J
1	Colorimeter Tubes, w/caps	0290-6
1	Tablet Crusher	0175
1	Water Sample Collecting Bottle	0688
1	1200 Colorimeter for Bromine DPD	26730

**\*WARNING:** Reagents marked with a \* are considered hazardous substances. Material Safety Data Sheets (MSDS) are supplied for these reagents. For your safety, read label and accompanying MSDS before using.

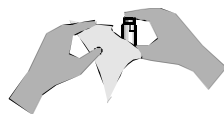
To order individual reagents or test kit components, use the specified code number.

#### **DPD BROMINE INTRODUCTION**


Bromine is added to water to kill bacteria and other disease-producing organisms, control algae, and remove undesirable odors and colors. Bromine added to water, forms hypobromous acid, the sanitizing form of bromine. Bromine forms free available bromine and combined bromine or bromamines. Combined bromine is a very active sanitizer.

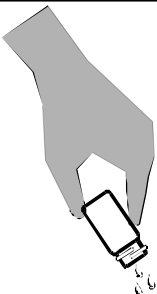
## BROMINE TEST PROCEDURE - DPD METHOD

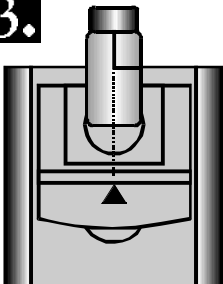
Read the 1200 Colorimeter Manual before proceeding. Carefully wipe tubes dry before inserting into the colorimeter chamber.





### FREE AVAILABLE BROMINE

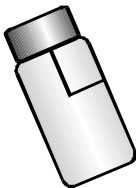
**1.**  Fill the Water Sample Collecting Bottle (0688) with sample water. This will be used to dispense sample water for the tests.


**2.**  Rinse and fill a colorimeter tube (0290) to the 10 mL line with sample water. Cap and wipe dry.

**3.**  Insert the tube into the chamber, being sure to align the index line with the arrow on the meter. Close the lid. This tube is the blank or zero.

**4.**  Push the **READ** button to turn the meter on. Press the **ZERO** button and hold it for 2 seconds until **bLR** is displayed. Release the button to take a zero reading (0.00 ppm).

**5.**  Empty all but a few drops of sample from tube. Add one \*Chlorine DPD #1 Tablet (6903) and crush with tablet crusher (0175). **NOTE:** To insure accurate results, tablet must be crushed before filling tube.

**6.**  Fill to 10 mL line with sample. Cap and mix until tablet disintegrates. Make readings within 30 seconds after disintegration of the tablet.

**7.**  Align the index line with the arrow on the meter, insert tube into chamber. Close the lid. Push the **READ** button. Record results as ppm Bromine.

## **DPD BROMINE TEST METHOD SPECIFICATIONS**

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### **APPLICATION**

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Drinking, surface, saline waters; swimming pool water; domestic and industrial waters and wastes.

### **RANGE**

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0 to 7.0 mg/L Bromine (may be extended by dilution)

### **METHOD**

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In buffered sample, bromine reacts with disthyl-p-phenylene diamine (DPD) to produce a pink-red color in proportion to the concentration of bromine present.

### **HANDLING & PRESERVATION**

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Bromine in aqueous solutions is not stable, and the bromine content of samples or solutions, particularly weak solutions, will rapidly decrease. Exposure to sunlight or agitation will accelerate the reduction of bromine present in such solutions. For best results, start analysis immediately after sampling. Samples to be analyzed for bromine cannot be preserved or stored.

### **INTERFERENCES**

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The only interfering substance likely to be encountered in water is oxidized manganese. The extent of this interference can be determined by treating a sample with sodium arsenite to destroy the bromine present so that the degree of interference can be estimated.

Iodine and chlorine can also interfere, but these are not normally present unless they have been added as sanitizers.

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