



1200 COLORIMETER CHLORINE DIOXIDE

DPD TABLET TEST

MODEL 1200-CLO • CODE 3671-01

QUANTITY	CONTENTS	CODE
100	*Chlorine DPD #1 Tablets (Instrument Grade)	*6903-J
15 mL	Glycine	6811-E
1	Colorimeter Tubes, w/caps	0290-6
1	Tablet Crusher	0175
1	Water Sample Collecting Bottle	0688
1	1200 Colorimeter for Chlorine Dioxide	26731

***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.

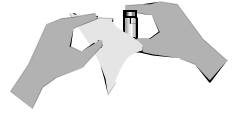
To order individual reagents or test kit components, use the specified code number.

INTRODUCTION


Chlorine dioxide is used as a substitute for and an adjunct to chlorine in water treatment. It is better than chlorine in eliminating taste and odor in certain cases. Chlorine dioxide, unlike chlorine, does not produce carcinogenic chlorinated organic compounds when reacted with organic materials. A disadvantage is the higher cost of producing chlorine dioxide compared to chlorine.

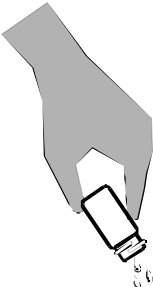
CHLORINE DIOXIDE TEST PROCEDURE - DPD METHOD

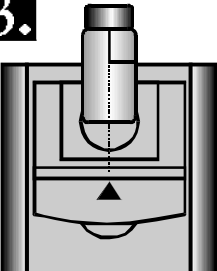
Read the 1200 Colorimeter Manual before proceeding. Carefully wipe tubes dry before inserting into the colorimeter chamber.

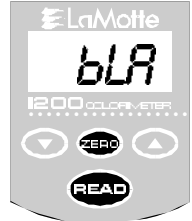


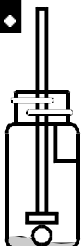
CHLORINE DIOXIDE

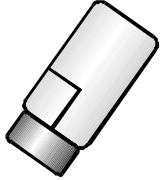
1.  Fill the Water Sample Collecting Bottle (0688) with sample water. This will be used to dispense sample water for the tests.


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 5 drops of Glycine Solution (6811). 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 invert to mix until tablet disintegrates. Wipe tube dry. 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 Chlorine Dioxide.

NOTE: If reading displays E_{r2} , repeat procedure on diluted sample, and multiply the result by the appropriate dilution factor. See 1200 Colorimeter Instruction Manual for procedure.

CAUTION: DO NOT leave reacted DPD samples in test tubes (0290). Discard sample and thoroughly rinse tubes. If allowed to remain, DPD will stain tubes, significantly impairing the operation of the 1200 Colorimeter. If necessary, acid wash, and vigorously clean glassware with test tube brush and detergent.

CHLORINE DIOXIDE TEST METHOD SPECIFICATIONS

APPLICATION

Drinking and pool waters; domestic and industrial wastewater.

RANGE

0 to 7.0 ppm Chlorine Dioxide

METHOD

Chlorine dioxide reacts with DPD to form a red color in proportion to the concentration.

HANDLING & PRESERVATION

Test as soon as possible to avoid loss of chlorine dioxide.

INTERFERENCES

Chlorine interference is eliminated by the addition of glycine to the sample before the indicator.

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