

CHLORINE DIOXIDE

DPD METHOD • CODE 3644-SC

QUANTITY	CONTENTS	CODE
100	*Chlorine #1 Instrument Grade Tablets	*6903-J
15 mL	Glycine Solution	6811-E
1	Tablet Crusher	0175

*WARNING: Reagents marked with an * are considered hazardous substances. To view or print a Material Safety Data Sheet (MSDS) for these reagents see MSDS CD or our web site. To obtain a printed copy, contact us by e-mail, phone or fax.

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.

APPLICATION: Drinking and pool waters; domestic and industrial wastewater; food sanitization.

RANGE: 0.00–8.00 Chlorine Dioxide

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

SAMPLE HANDLING & PRESERVATION: Test as soon as possible to avoid loss of chlorine dioxide.

INTERFERENCE: Chlorine interference can be removed with the use of glycine. Very high levels of chloramines may interfere if the test result is not read immediately. Oxidized manganese interferes but can be removed with arsenite. Bromine and iodine interfere. Chromate interference can be removed with a thioacetamide blank correction.

PROCEDURE

1. Press and hold **ON** button until colorimeter turns on.
2. Press **ENTER** to start.
3. Press **ENTER** to select TESTING MENU.
4. Select ALL TESTS (or another sequence containing 20 CHLOR DIOX) from TESTING MENU.
5. Scroll to and select 20 CHLOR DIOX from menu.
6. Rinse a clean tube (0290) with sample water. Fill to 10 mL line with sample.
7. Insert tube into chamber, close lid and select SCAN BLANK.
8. Remove tube from colorimeter. Pour out all but a sufficient amount of sample water to cover tablet. Add 5 drops of Glycine Solution (6811).
9. Add one *Chlorine DPD #1 Instrument Grade Tablet (6903). Crush tablet with tablet crusher. Cap and shake until tablet dissolves. Fill to 10 mL line with sample water. Solution will turn pink if chlorine dioxide is present. Wait 15 seconds, but no longer than 30 seconds. Mix.
10. Insert tube into chamber, close lid and select SCAN SAMPLE.
11. Press **OFF** button to turn colorimeter off or press **EXIT** button to exit to a previous menu or make another menu selection.