AMT RAPID CHEM Mercury(II)

AMT-I-C-008 (Liquid)| Mercury(II) Test 3- 200 mg/L

PRINCIPLE OF METHOD

Read the supplied MSDS before running this test. Additional copies of MSDS can be obtained by contacting AMT Customer Service.

This method is a convenient application of the spectrophotometric method for the determination of Mercury(II) in water samples.

Mercury is an extremely toxic metal and symptoms of mercury (methyl mercury) poisoning include instantaneous neurological damages particularly irritability, paralysis, insanity, blindness, chromosome damage and birth defects. AMT Mercury Test ampoule contains diphenylthiocarbazone (dithizone) which reacts in slightly acidic 50% aqueous 1,4-dioxane media with mercury(II) to give an orange chelate. AMT Mercury Test is able to detect lead in liquid sample as low as 3 ppm.

IMPORTANT CONSIDERATIONS

Review the Material Safety Data Sheet (MSDA/SDS) for all chemical that are used. Use recommended personal protective equipment (PPE)

Reacted samples MUST be disposed of as a hazardous waste. Dispose of reacted solutions according to local, state and federal regulations. Refer to the Safety Data Sheet for disposal information of unused reagents. Refer to the environmental, health and safety staff for your facility and/or local regulatory agencies for further disposal information.

ITEMS SUPPLIED

Test ampoules
Safety cap

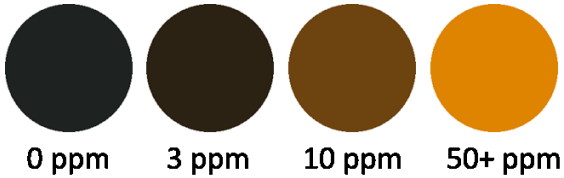
SAMPLE PREPARATION

Collect sample in a clean glass or plastic bottle that has been cleaned with 1:1 hypochloric acid and rinsed with deionized water.
(optional) To preserve samples for later analysis, adjust the sample pH to less than 2 with concentrated nitric acid (about 2ml per liter). Note: no adjustment is necessary of the sample is to be analyzed immediately.
Preserved samples can be kept at room temperature for up to 6 months.
If sample pH is adjusted correct the test result for the addition of any solution.
If sample is diluted correct the test result for the dilution factor.

TEST PROCEDURE

- Gather the sample in the supplied sample cup filling to the 25 mL line or preferably in a single use sterile sample container.
- Remove ampoule from box and carefully remove and save the provided safety cap. Inspect the ampoule tip for breakage. If broken discard properly and get a new ampoule.
- With an unbroken ampoule, place the tip (without safety cap) in the sample container with the tip against the sample container wall holding the ampoule at a 45° angle. Gently push the tip against the sample container wall with a slight twisting motion. The ampoule tip will break and the sample will automatically be drawn into the ampoule. Make sure to keep the ampoule tip in the sample until it has finished filling.
- Remove the ampoule from the sample.
- Invert the ampoule multiple times to mix thoroughly.
- Check ampoule color development. Negative sample will show dark green to blue color. Positive test is indicated by the disappearance of dark blue color and the appearance of clear orange color. Compare the sample color with the reaction reference chart to estimate lead concentration

RACTION REFERENCE CHART



STORAGE

Upon receipt, store tubes in the dark at 2 – 25 °C. Avoid freezing and overheating. Ampoulated reagent stored as indicated may be inoculated up to the expiration date. Minimize exposure to light.

PRODUCT DETERIORATION

Do not use ampoules if they show evidence of microbial contamination, discoloration, or other signs of deterioration.

EXPIRATION DATE

The product is stable if stored properly for 4 year from manufacture. The expiration date applies to media stored at or below 25 °C without direct exposure to light.

WARNING AND PRECAUTIONS

- For *in vitro* Diagnostic Use.
- For laboratory and field use by trained professionals.
- The AMT RAPID CHEM is a glass ampoule with a sharp tip when activated. USE EXTREME CAUTION when breaking the tip. Always carefully apply the provided safety cap.
- Dispose of broken unused ampoules in a broken glass receptacle.
- Dispose of used ampoules in an appropriate sharps container or sealed puncture resistant receptacle then offer for biohazard processing according to local, state and Federal regulations.
- Keep away from children.
- Not for use as a diagnostic tool on humans or animals.
- Observe aseptic techniques and established precautions against microbiological hazards throughout all procedures before, during and after use.
- Prepared ampoules, specimen containers and other contaminated materials must be sterilized by autoclaving or disinfectant solution before discarding.

Contact Us

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