

Taylor's Metal Test Kits for Pools & Spas

INTRODUCTION

Metal in pool and spa water can come from three sources: from the **fill water** itself, as metals occur naturally in ground and surface water; from **treatment products** containing metal, such as copper algaecides; or, most commonly, from **corrosion** of the metal piping and equipment or metal objects dropped in the water. Unsightly colored water and stained surfaces are usually the result of excess metal(s) in the water.

Taylor offers several colorimetric kits to measure the concentration of the metals most commonly found in pool and spa water: **copper**, **iron**, and **manganese**, which are listed below.

To prevent water conditions that lead to corrosion, also purchase a test kit capable of monitoring the water chemistry parameters involved in **water balance** (pH, total alkalinity, and calcium hardness).

COPPER KITS

K-1155

Slide comparator for copper; 0–3.0 ppm **total** Cu

K-1730

Color Card comparator for copper; 0.05–1.0 ppm **free** Cu

K-1738

Midget comparator for copper; 0.2–3.0 ppm **total** Cu

IRON KITS

K-1153

Slide comparator for iron; 0–2.0 ppm **total** Fe

K-1716

Midget comparator for iron; 0–2.0 ppm **total** Fe

COPPER & IRON KIT

K-1264

Midget comparator for copper; 0.2–3.0 ppm **total** Cu

Midget comparator for iron; 0–2.0 ppm **total** Fe

MANGANESE KIT

K-3221

Long Viewpath comparator for manganese; 0–3.0 ppm Mn



Unless the sample appears colored or turbid, a Midget comparator may be used to determine the concentration of metal in the water. K-1264 is shown.

USER BENEFITS

- Slide™ and Long Viewpath™ comparators (using nine liquid-color standards molded in impact-resistant plastic) are **designed to compensate for color and turbidity**. Midget™ comparators (using eight liquid-color standards) are the **economical alternative when color and turbidity are not present**.
- **Color Cards are laminated** to protect the printed-color standards from water and chemicals.
- These test kits are practical for both **on- and off-site** testing.
- **Waterproof instructions** are printed on plastic-impregnated paper that resists fading and tearing.
- Custom-molded, durable plastic cases provide **safe storage** for all tests.
- **Proven chemistries** are based on *Standard Methods for the Examination of Water and Wastewater*, APHA, Washington, DC, and/or *American Society for Testing and Materials*, ASTM, Philadelphia, PA. Some methods use proprietary chemistry developed by Taylor Technologies.



the most trusted name in water testing

Taylor Technologies, Inc.
410-472-4340
800-TEST KIT (837-8548)
www.taylortechnologies.com

ISO 9001:2008 Certified

ALSO AVAILABLE

- A wide array of single- and multiparameter kits featuring color-matching and/or drop-count tests.
- Taylor's **TTi® Colorimeter** (M-2000); test a dozen parameters commonly encountered in pool/spa settings and transfer results to a PC database.
- Myron L Company portable instruments that may be purchased alone or paired with our reagents.
- Testing supplies and kit replacement parts (e.g., burets, flasks, test tubes, and test cells).
- Computerized water analysis at www.taylortechnologies.com.
- Toll-free technical assistance at **800-TEST KIT**.

REPRESENTATIVE TEST PROCEDURE

Reproduced from K-1264 instruction:

COMBINATION MIDGET COPPER/IRON TEST		Instr. #5120
COMPONENTS:		
Copper		
1 x 3243	Cap, Test Cell, 11.5 mL, rectangular, plastic	
1 x 4024	Test Cell, Calibrated 11.5 mL, plastic	
2 x 4028	Pipets, Calibrated 0.5 mL, plastic w/ cap	
1 x 9049	Midget, Copper, 0.2-3.0 ppm	
1 x R-0860	Copper Reagent #1*	
1 x R-0861	Copper Reagent #2**	
Iron		
1 x 3243	Cap, Test Cell, 11.5 mL, rectangular, plastic	
1 x 4024	Test Cell, Calibrated 11.5 mL, plastic	
2 x 4028	Pipets, Calibrated 0.5 mL, plastic w/ cap	
1 x 9051	Midget, Iron, 0-2.0 ppm	
1 x R-0851	Iron Reagent #1***	
2 x R-0852	Iron Reagent #2	
Misc.		
1 x 5120	Instruction	
1 x 6002	Brush, Cell Cleaner	
TO ORDER REPLACEMENT PARTS AND REAGENTS CALL TOLL-FREE 800-TEST KIT (800-837-8548).		
PROCEDURE:		
CAREFULLY READ AND FOLLOW PRECAUTIONS ON REAGENT LABELS. KEEP REAGENTS AWAY FROM CHILDREN.		
Copper (Color Comparison)		
1. Rinse and fill 11.5 mL test cell (#4024) to mark with water to be tested.		
2. Using a 0.5 mL pipet (#4028), add 0.5 mL R-0860 Copper Reagent #1*. Cap and mix.		
3. Using a separate 0.5 mL pipet, add 0.5 mL R-0861 Copper Reagent #2*. Cap and mix.		
4. Wipe dry and place in comparator (#9049) WITH FROSTED SIDE FACING OPERATOR. WAIT 5 MINUTES.		
5. Match color in test cell with a color standard. Record as parts per million (ppm) total copper.		
Iron (Color Comparison)		
1. Rinse and fill 11.5 mL test cell (#4024) to mark with water to be tested.		
2. Using a 0.5 mL pipet (#4028), add 0.5 mL R-0851 Iron Reagent #1***. Cap and mix. WAIT 2 MINUTES.		
3. Using a separate 0.5 mL pipet (#4028), add 1.0 mL (2 x 0.5 mL) R-0852 Iron Reagent #2. Cap and mix.		
4. Wipe dry and place in comparator (#9051) WITH FROSTED SIDE FACING OPERATOR.		
5. Match color in test cell with a color standard. Record as parts per million (ppm) total iron.		
*WARNING: Copper Reagent #1 (R-0860) contains 4.4% ammonium hydroxide, a corrosive alkali.		
**WARNING: Copper Reagent #2 (R-0861) contains 44% isopropanol (w/w), a flammable liquid.		
***WARNING: Iron Reagent #1 (R-0851) contains 8.8% hydrochloric acid, a corrosive acid.		
		
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