

MICclean[®] CHEMICAL MONITOR KIT

For the Monitoring of Rinse Waters After Cleaning



BTIproductsLLC

INSTRUCTIONS

Read all instructions before sample collection

Before collecting sample, review contents of this test kit (page 3). This kit allows testing of *ten* samples.

Warranty information can be found on page 3 of these instructions.

Introduction: The MICclean[®] Chemical Monitor Kit is used to monitor rinse waters after cleaning fire protection systems (FPS) to ensure that no residual cleaning chemicals, corrosion products, dirt, etc. remain in the FPS. Follow the cleaning protocols and acceptance criteria provided in BTI Products, LLC's mitigation protocols.

For technical assistance, to request MSDS, or to place an order:

Call Toll Free: 970.884.4629

Or E-mail: products@bti-labs.com

SECTION 1. BEFORE YOU BEGIN MONITORING

1. Visually inspect pipe from various locations throughout the FPS to determine if FPS is clean.
2. Once FPS appears clean, test rinse waters using procedures in Section 2.
3. Proceed to Section 2.

SECTION 2. MONITORING RINSE WATERS

1. Collect approximately one (1) gallon of rinse water to be tested in white bucket.
2. Perform following chemical tests:
 - a. pH**
 1. Remove test strip from its packet. *Be careful* not to rip into instructions or color chart on wrapper!
 2. Follow instructions provided on wrapper.
 3. Record pH value on attached Data Sheet.
 4. Disregard Alkalinity test and proceed to next step.
 - b. Total Iron**
 1. Pour 4 ml of rinse water into 5 ml sampling tube. Add contents of iron reducer pack and mix. Reducer contents will not dissolve completely.
 2. Perform total iron test on water in 5 ml sampling tube. Follow instructions provided on wrapper (Method A), and use same precautions as for other test strips.
 3. Record total iron value on attached Data Sheet.
 4. Discard water in 5 ml sampling tube appropriately.
 5. Proceed to next step.
 - c. Total Chelant**
 1. Use enclosed LaMotte Total Chelant Test Kit to measure total NTA (Nitrilotriacetic acid) chelant levels.
 2. Follow instructions provided in test kit.
 3. Record total chelant value on attached Data Sheet.
 4. Proceed to next step.
 - e. Oils & Particulates**
 1. Let water in bucket sit for 30 minutes.
 2. Observe surface of water for evidence of oils (a sheen on water). Record data on attached Data Sheet.
 3. Observe bottom of bucket for amount and color(s) of solids that have settled out of water. Record data on attached Data Sheet.
4. Proceed to next step.
3. Proceed to Section 3.

SECTION 3. ACCEPTABLE TEST RESULTS

Rinse waters should have the following characteristics:

- **pH:** pH should be the same as that of source water (make-up water).
- **Total iron:** less than 5 parts per million (ppm).
- **Total chelant:** negative.
- **Detergent:** less than 3 parts per million (ppm).
- **Oils & particulates:** no visible oils or particulates.

Note: If rinse waters do not conform to these parameters, repeat rinsing until FPS rinse waters meet acceptable criteria.

MICclean® CHEMICAL MONITOR KIT DATA SHEET

Sample #	Sample Name/ Location	pH	Total Iron (ppm)	Chelant (+/-)	Detergent (ppm)	Oils (yes/no)	Particulates	
							Amount	Color
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

**MICclean® CHEMICAL MONITOR KIT: List
of Kit Contents**

1. 10 pH Test Strips
2. 10 Total Iron Test Strips
3. 10 Iron Reducer Packs
4. 10, 5 ml Centrifuge Tubes
5. 1 LaMotte Total Chelant Test Kit
6. 1 Chemets Detergent Test Kit
7. 1 White Plastic Bucket

WARRANTY

BTI Products, LLC's products are warranted by **BTI Products, LLC** to perform as described in the technical literature supplied with each product, provided the products are used, stored, and maintained in accordance with the directions provided. They must also be used before the expiration date. Adequate quality control must be done by the user of the products.

BTI Products, LLC disclaims any implied warranty of merchantability or fitness of its products for any other purpose than described in its technical literature, and in no event shall **BTI Products, LLC** be held liable for any consequential damages arising out of the aforesaid express warranty.

Should you have questions about this product or any of the products and services we provide, please call or write:

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We welcome all comments and inquiries.

Usage & Storage: Use by expiration date printed on kit box label. Store test materials in a cool, dry place out of direct sunlight. Do not eat or drink any of the contents of the kit. Keep out of the reach of children. Material Safety Data Sheets available upon request.

Disposal of Test Materials: Properly dispose of all kit components. Federal and local laws apply. Contact your local waste authorities for specific disposal instructions.

Need Help?

Call 970.88.4629