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Sulfite (SO_3) Test Kit

Part No. #145-70

Instruction Manual

Updated 11/30/2017

Ver. 2.0

OFI Testing Equipment, Inc.

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Equipment

#153-28	Stirring Rod, Polyethylene, 4"
#153-43	Transfer Pipet, 5 mL
#153-51	Beaker, Glass, 250 mL
#167-01	Carrying Case

Reagents

#145-551	Starch Indicator Solution, 2 oz (60 mL)
#145-554	Potassium Iodide - Iodate Solution, 8 oz (250 mL)
#206-01	Deionized Water, 8 oz (250 mL)
#220-00	Phenolphthalein Indicator Solution, 2 oz (60 mL)
#275-00	Hydrochloric Acid, 37%, Concentrated, 2 oz (60 mL) UN1789

Procedure

1. Collect a sample of filtrate and expose it to the air as little as possible.
2. Measure 1 to 50 mL of filtrate and transfer it into the beaker. The larger the sample, the more accurate the results will be.
3. Add 3 to 4 drops of Phenolphthalein Indicator solution. The sample may turn red.
4. Add 1 mL of Hydrochloric Acid and 1 mL of Starch solution to the beaker and stir well. If the red color does not clear, continue to add HCl dropwise until it disappears.
5. Titrate with Potassium Iodide-Iodate solution dropwise until a faint permanent blue color develops in the sample. This will be the end point of the titration.



Note

If the filtrate sample is dark in color, it will require dilution in order to see the end point. Dilute with warm, deionized water until a blue end point color change can be detected. This may require some experimentation.

Calculation

$$\text{Sulfite (SO}_3\text{), ppm} = \frac{\text{Potassium Iodide-Iodate Solution} \times 496}{\text{Filtrate Volume (mL)}}$$

$$\text{Sodium Sulfite (Na}_2\text{SO}_3\text{), ppm} = \text{Sulfite (SO}_3\text{)} \times 1.57$$

Warranty and Return Policy

Warranty:

OFI Testing Equipment, Inc. (OFITE) warrants that the products shall be free from liens and defects in title, and shall conform in all respects to the terms of the sales order and the specifications applicable to the products. All products shall be furnished subject to OFITE's standard manufacturing variations and practices. Unless the warranty period is otherwise extended in writing, the following warranty shall apply: if, at any time prior to twelve (12) months from the date of invoice, the products, or any part thereof, do not conform to these warranties or to the specifications applicable thereto, and OFITE is so notified in writing upon discovery, OFITE shall promptly repair or replace the defective products. Notwithstanding the foregoing, OFITE's warranty obligations shall not extend to any use by the buyer of the products in conditions more severe than OFITE's recommendations, nor to any defects which were visually observable by the buyer but which are not promptly brought to OFITE's attention.

In the event that the buyer has purchased installation and commissioning services on applicable products, the above warranty shall extend for an additional period of twelve (12) months from the date of the original warranty expiration for such products.

In the event that OFITE is requested to provide customized research and development for the buyer, OFITE shall use its best efforts but makes no guarantees to the buyer that any products will be provided.

OFITE makes no other warranties or guarantees to the buyer, either express or implied, and the warranties provided in this clause shall be exclusive of any other warranties including ANY IMPLIED OR STATUTORY WARRANTIES OF FITNESS FOR PURPOSE, MERCHANTABILITY, AND OTHER STATUTORY REMEDIES WHICH ARE WAIVED.

This limited warranty does not cover any losses or damages that occur as a result of:

- Improper installation or maintenance of the products
- Misuse
- Neglect
- Adjustment by non-authorized sources
- Improper environment
- Excessive or inadequate heating or air conditioning or electrical power failures, surges, or other irregularities
- Equipment, products, or material not manufactured by OFITE
- Firmware or hardware that have been modified or altered by a third party
- Consumable parts (bearings, accessories, etc.)

Returns and Repairs:

Items being returned must be carefully packaged to prevent damage in shipment and insured against possible damage or loss. OFITE will not be responsible for equipment damaged due to insufficient packaging.

Any non-defective items returned to OFITE within ninety (90) days of invoice are subject to a 15% restocking fee. Items returned must be received by OFITE in original condition for it to be accepted. Reagents and special order items will not be accepted for return or refund.

OFITE employs experienced personnel to service and repair equipment manufactured by us, as well as other companies. To help expedite the repair process, please include a repair form with all equipment sent to OFITE for repair. Be sure to include your name, company name, phone number, email address, detailed description of work to be done, purchase order number, and a shipping address for returning the equipment. All repairs performed as "repair as needed" are subject to the ninety (90) day limited warranty. All "Certified Repairs" are subject to the twelve (12) month limited warranty.

Returns and potential warranty repairs require a Return Material Authorization (RMA) number. An RMA form is available from your sales or service representative.

Please ship all equipment (with the RMA number for returns or warranty repairs) to the following address:

OFI Testing Equipment, Inc.
Attn: Repair Department
11302 Steeplecrest Dr.
Houston, TX 77065
USA

OFITE also offers competitive service contracts for repairing and/or maintaining your lab equipment, including equipment from other manufacturers. For more information about our technical support and repair services, please contact techservice@ofite.com.