

TEST KITS

ALPHAPAK 5 TEST KIT

KIT FOR TESTING DISSOLVED OXYGEN LEVELS
WHEN USING SULPHITE-BASED OXYGEN SCAVENGER



DESCRIPTION

ALPHAPAK 5 TEST KIT is used for checking the levels of dissolved oxygen when using Sulphite-based oxygen scavenger (ALPHA Cat Sulphite Liq). A sulphite residual concentration must be maintained to prevent pitting and oxidation of metal components in boiler feed and effluent waters. A high level of sulphite measurements in a lowered pH, promotes corrosion. Monitoring sulphite is also important for environmental control. Sulphite ions are not only toxic to aquatic lifeforms, but they also have the ability to remove dissolved oxygen in water and can destroy the delicate balance of ecology of lakes, rivers and ponds.

ALPHAPAK 5 TEST KIT makes monitoring easy, quick and safe. The compact size gives the user the versatility to utilize the kit practically anywhere.

APPLICATION

Corrosion protection of boilers, via measuring the water chemical parameters.

USE

1. Remove the cap from the small plastic vessel, rinse with water sample, fill to the 5 mL mark and replace the cap.
2. Add 4 drops each of Sulfamic Acid Solution and EDTA Reagent through the cap port and mix by carefully swirling the vessel in tight circles.
3. Add 2 drops of Sulfuric Acid Solution through the cap port and mix as described before.
4. Add 1 drop of Starch Indicator through the cap port and mix.
5. Take the titration syringe and push the plunger completely into the syringe. Insert tip into the Reagent Titrant Solution and pull the plunger out until the lower edge of the plunger seal is on the 0 mL mark of the syringe.
6. Place the syringe tip into the cap port of the plastic vessel and slowly add the titration solution dropwise, swirling to mix after each drop. Continue adding titration solution until the solution in the plastic vessel changes from colourless to blue.
7. Read off the millilitres of titration solution from the syringe scale and multiply by 200 to obtain the ppm of sodium sulphite.



$\times 200 = \text{Na}_2\text{SO}_3$

CONTENTS

Each kit performs about 110 tests (average).

- Instructions
- Sulfamic Acid Solution, 1 bottle with dropper (30 mL)
- EDTA Reagent, 1 bottle with dropper (30 mL)
- Sulphuric Acid solution, 1 bottle with dropper (15 mL)
- Starch Indicator, 1 bottle with dropper (10 mL)
- Reagent Titrant Solution, 1 bottle (120 mL)
- 2 calibrated vessels (20 & 50 mL) and 1 calibrated syringe with tip

- ✓ Helps maintaining optimum corrosion protection
- ✓ Protects valuable equipment assets
- ✓ Protects aquatic environment from high levels of sulphite ions
- ✓ Quick, easy and safe monitoring

PROBLEMS SOLVED

- ✓ Corrosion formation on boiler surfaces
- ✓ Sulphite levels in boiler water

APPLICATION AREAS

- ✓ Boiler water

PRODUCT CODE: WT 349