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# **Product Technical Fact Sheet**

Product Codes: NIT and NAT

Product Description: Nitrite and Nitrate Test Strips (sold individually and as a combo strip)

### Application:

These strips are used to detect nitrite and/or nitrate levels in water samples. Typical samples include groundwater, well water, and drinking water. They can also be used for industrial water applications. Measurements of solids (soil, food, etc.) can be done by first performing an extraction procedure. Verification and validation of the procedure is highly recommended.

Test Range: Nitrite – 0-25 ppm as Nitrite Nitrate – 0-500 as Nitrate

Test Increments: Nitrite color chart calibrated at 0, 0.5, 1.0, 5, 10, and 25 ppm (as Nitrite)

Nitrate color chart calibrated at 0, 10, 25, 50, 100, 250, and 500 ppm (as Nitrate)

Accuracy: +/- ½ color chart unit

Detection Limit: Nitrite – 0.25 ppm Nitrate – 5 ppm

Conversion: To express Nitrite as Nitrite-Nitrogen divide result by 3.3, for Nitrate as

Nitrate-Nitrogen divide by 4.4

## Storage Recommendations:

Store in original packaging in a cool (20-30C), dry, place out of direct sunlight. Strips are susceptible to light and humidity.

Shelf-Life: One year from date of manufacture when stored properly in original packaging.

Interferences: None to report.

#### Instructions for Use:

- 1. Remove one test strip from the vial, being careful not to touch the test pad with your fingers.
- 2. Dip the test strip into the solution to be tested for 2-3 seconds.
- 3. Remove and shake off any excess liquid.
- 4. Compare the test pad to the color chart after 30 seconds for Nitrite strips and 60 seconds for Nitrate strips.

### Chemistry Behind the Test:

Nitrite is detected and analyzed by formation of a red/pink color on the test pad utilizing the Griess reaction chemistry. Nitrate is detected using the same chemistry; however, the Nitrate is first reduced to Nitrite by a reducing agent impregnated in the test pad. The intensity of the color developed is proportional to the amount of nitrite and/or nitrate present.

### Disclaimer:

The Nitrite and Nitrate strips are not intended for use to diagnose, treat, or monitor any medical condition.