

## TECHNICAL INSERT

|         |            |   |             |             |
|---------|------------|---|-------------|-------------|
| Item No | 594        | ChemDisk™ Monitor for<br>Nitrogen Dioxide | Prepared by | CG          |
| Edition | MARCH 2025 |   | Approved by | MDR Peralta |

The ChemDisk™ Personal Monitor is designed to measure exposure to chemicals in order to demonstrate workplace compliance with Permissible Exposure Limits (PELs) and Short Term Exposure Limits (STELs) defined by the Occupational Safety and Health Act of 1970 and Title 29 Code of Federal Regulations.

This **Technical Insert** contains product specific information on use and storage.

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|---|---|
| <b>Sampling Medium:</b>                           | Glass Fiber Filter (GFF) treated with triethanolamine (TEA)   |
| <b>Analyte Sampled:</b>                           | Nitrogen Dioxide (NO <sub>2</sub> )   |
| <b>Analytical Method:</b>                         | Modified OSHA 182. TEA traps NO <sub>2</sub> as acid salts which are extracted with buffer and analyzed as nitrate ions by Ion Chromatography (IC). |
| <b>Recommended Sampling Time:</b>                 | Ceiling = 15 minutes; TWA = 8 hours<br>Functional Range: 15 minutes – 8 hours   |
| <b>Recommended Holding Time:</b>                  | Monitors must be received by lab <b>within four (4) weeks after sampling.</b>   |
| <b>Sample Capacity:</b>                           | >100 ppm for 8 hour sample (>800 ppm-hrs)   |
| <b>Reporting Limit (RL):</b><br>*AT Labs specific | 0.79 ppm for 15 minute sample; 0.025 ppm for 8 hour sample (0.2 ppm-hrs)  |
| <b>Sampling Rate (SR):</b>                        | 22.3 mL/min   |
| <b>Interfering Substance(s):</b>                  | None known  |
| <b>Effect of Temperature:</b>                     | Effect on result ≤ 5% within 0 - 50°C (32 - 122°F)  |
| <b>Effect of Humidity:</b>                        | Functions as claimed within 10 - 80% RH   |
| <b>Accuracy (MTE):</b>                            | Meets or exceeds OSHA requirements for accuracy:<br>Maximum Total Error (MTE) ≤ 25% at PEL; ≤ 35% at STEL   |
| <b>Storage Conditions:</b>                        | Store at controlled room temperature.<br>Do Not Use after expiration date printed on pouch.   |
| <b>IMPORTANT:</b>                                 | Warranty valid only if <b>Instructions for Use</b> have been followed.  |
| <b>WARNING:</b>                                   | Wash affected area thoroughly if sampling medium is contacted.  |

For detailed directions, see **Instructions for Use** included in each package of Monitors.

For detailed information about the ChemDisk™ Personal Monitor, refer to *AT Labs IH Sampling Guide* at [www.assaytech.com](http://www.assaytech.com)

Call TOLL FREE NUMBER 1-800-833-1258 or Email: [custservice@assaytech.com](mailto:custservice@assaytech.com)