

## TECHNICAL INSERT - Lot 12A16 to 10C18

|         |                   |                       |             |     |
|---------|-------------------|-----------------------|-------------|-----|
| Item No | 593               | ChemDisk™ Monitor for | Prepared by | VL  |
| Edition | December 28, 2016 | Mercury Vapor         | Approved by | CRM |

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.

9159-593 12/16

|                                   |   |
|-----------------------------------|---|
| <b>Sampling Medium:</b>           | 0.5 mg pure gold film coated on a plastic disc.   |
| <b>Analyte Sampled:</b>           | Mercury Vapor   |
| <b>Analytical Method:</b>         | AT CVAF: Acid digestion; analysis of elemental mercury by cold vapor atomic fluorescence (CVAF).  |
| <b>Recommended Sampling Time:</b> | PEL = 8 hrs or full shift<br>Functional range: 1 – 12 hours   |
| <b>Recommended Holding Time:</b>  | Monitors must be received by Lab <b>within four (4) weeks after sampling.</b>   |
| <b>Sample Capacity:</b>           | 1 µg of mercury which equates to 0.14 mg/M <sup>3</sup> for an 8-hr sample, or 1.1 mg-hr/M <sup>3</sup> .                                     |
| <b>Reporting Limit (RL):</b>      | 0.0007 mg/m <sup>3</sup> for 8 hours (0.006 mg/m <sup>3</sup> - hrs)  |
| <b>Sampling Rate (SR):</b>        | 14.9 mL/min   |
| <b>Interfering Substance(s):</b>  | Monitor may absorb hydrogen sulfide and chlorine but these chemicals do not interfere in the analysis.  |
| <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  |
| <b>Storage Conditions:</b>        | Store at controlled room temperature.<br><br>Do Not Use after Expiration Date printed on pouch.<br><br>Best stored away from Mercury sources. |
| <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.

## TECHNICAL INSERT – Starting with Lot 9B20

|         |                  |                       |             |      |
|---------|------------------|-----------------------|-------------|------|
| Item No | 593              | ChemDisk™ Monitor for | Prepared by | CLG  |
| Edition | October 19, 2020 | Mercury Vapor         | Approved by | MDRP |

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.

9159-593 10/20

|                                   |   |
|-----------------------------------|---|
| <b>Sampling Medium:</b>           | 0.5 mg pure gold film coated on a plastic disc.   |
| <b>Analyte Sampled:</b>           | Mercury Vapor   |
| <b>Analytical Method:</b>         | AT CVAf: Acid digestion; analysis of elemental mercury by cold vapor atomic fluorescence (CVAf).  |
| <b>Recommended Sampling Time:</b> | PEL = 8 hrs or full shift<br>Functional range: 1 – 12 hours   |
| <b>Recommended Holding Time:</b>  | Monitors must be received by Lab <b>within four (4) weeks after sampling.</b>   |
| <b>Sample Capacity:</b>           | 13.5 mg/m <sup>3</sup> for an 8-hr sample (108 mg/m <sup>3</sup> – hrs)   |
| <b>Reporting Limit (RL):</b>      | 0.00061 mg/m <sup>3</sup> for 8 hours (0.0049 mg/m <sup>3</sup> - hrs)  |
| <b>Sampling Rate (SR):</b>        | 17 mL/min   |
| <b>Interfering Substance(s):</b>  | Monitor may absorb hydrogen sulfide and chlorine but these chemicals do not interfere in the analysis.  |
| <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  |
| <b>Storage Conditions:</b>        | Store at controlled room temperature.<br><br>Do Not Use after Expiration Date printed on pouch.<br><br>Best stored away from Mercury sources. |
| <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.