

## TECHNICAL INSERT

Item No	571	ChemDisk™ Monitor for	Prepared by	CLG
Edition	10/15/2020	Aldehydes	Approved by	SG

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>	Fiberglass coated with 2,4-dinitrophenylhydrazine (DNPH)
<b>Analytes Sampled:</b>	Formaldehyde, Glutaraldehyde, and o-Phthalaldehyde; See <i>Sampling Guide</i> for other aldehydes
<b>Analytical Method:</b>	Modified OSHA 1007; Modified OSHA 64; Modified EPA TO-11: Desorption in acetonitrile; analysis of the DNPH derivative by high performance liquid chromatography (HPLC) with UV/VIS detector
<b>Recommended Sampling Time:</b>	Formaldehyde: PEL = 8 hrs or full shift; STEL = 15 min Glutaraldehyde: Ceiling = 15 min; IAQ = 24-72 hrs Functional range: 15 minutes - 72 hours
<b>Recommended Holding Time:</b>	Monitors must be received by Lab <b>within four (4) weeks after sampling.</b>
<b>Sample Capacity:</b>	Formaldehyde: 12.5 ppm for 8 hour sample (100 ppm-hrs )
<b>Reporting Limit (RL):</b>	Formaldehyde: 0.34 ppm for 15 min, 0.010 ppm for 8 hrs (0.080 ppm-hrs); Glutaraldehyde: 0.018 ppm for 15 min (0.0050 ppm-hrs);
<b>Sampling Rate (SR):</b>	Formaldehyde: 16.2 mL/min; Glutaraldehyde: 7.24 mL/min;
<b>Interfering Substance(s):</b>	Other aldehydes and ketones do not interfere if HPLC resolution is adequate.
<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 20 - 80% RH.
<b>Accuracy (MTE):</b>	Meets or exceeds OSHA requirements for accuracy: Maximum Total Error (MTE) ≤ 25% at PEL; ≤ 25% at STEL and action level.
<b>Storage Conditions:</b>	Store under <b>refrigerated conditions</b> for maximum shelf life. 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 information about the use of Formalin with our badges, refer to the *571 Aldehyde Sampler* page.

For information about each analyte which can be sampled, refer to *Sampling Guide*.