CHROMAIR® SYSTEM

- **Immediate, on-site results**
- **Easy-to-read color change**
- **Highly sensitive and selective**
- **Exposure data read directly from badge**
- **Measure TWA exposure**

- **Immediate response for short-term exposure measurements**
- **Patented design minimizes effects of humidity and velocity**
- **Light-weight and cost effective for personnel and area monitoring**

Principle of Operations

The ChromAir badge is a colorimetric direct-read monitor. It relies on the principle of diffusion; therefore it requires no pump to operate. Unlike traditional diffusion tubes, the patented design of the ChromAir badge provides a short and constant diffusion path irrespective of the sampling time or concentration. This unique feature provides accurate results immediately and throughout the sampling period.

The ChromAir monitor provides the user with six exposure levels. Most ChromAir badges indicate from 1/10 to 2 times the time-weighted-average for an eight hour work period. The scale printed on the badge and color comparator is based on exposure dose [parts per million times hour (ppm•hr)]. To determine the average concentration, locate the highest cell with a color change and divide the corresponding dose level (ppm•hr) by the sampling time in hours (hr). EXAMPLE: If the sampling time is 2 hours and the badge reads 40 ppm•hr, the average concentration is determined by: 40 ppm•hr/2hr. Therefore, the time weighted average concentration is 20 ppm.

[1]ChromAir glutaraldehyde STEL badges are for 15 minutes of monitoring only. The scale on the Badge is in ppm.
[2]ChromAir mercury badge and color comparator scale is in mg/m^3•hr.
[3]Coefficient must be applied to scale printed on badge.
[4]ChromAir ozone badges are ten times more sensitive to ozone than nitrogen dioxide.

PART #	ANALYTE	RANGE (ppm•hr)	INTERFERENCES
380020	Acetone	20 - 24,000	NH_3, MEK, MIBK, MPK
380003	Ammonia	4 - 300	RNH_2
380008	Carbon Monoxide	10 - 525	Alkenes, H_2, H_2S
380004	Chlorine	0.4 - 13	Br_2, I_2, HCl
380007	Formaldehyde	0.3 - 12	Acrolein
380017	Glutaraldehyde	0.04 - 0.95[1]	None Known
380009	Hydrogen Sulfide	1 - 240	None Known
380018	Mercury	0.125 - 1.6[2]	Strong Oxidizers
380020	Methyl Ethyl Ketone	18 - 21,600[3]	NH_3, Acetone, MIBK, MPK
380020	Methyl Isobutyl Ketone	16 - 19,200[3]	NH_3, MEK, Acetone, MPK
380010	Ozone	0.08 - 1.6	H_2O_2, NO_2[4]

Color Comparators

For higher resolution and accuracy, the ChromAir badges may be used with the ChromAir color comparators. The color scales on the color comparator identically match the colors formed on the ChromAir badge. Available for following ChromAir badges:

PART #	ANALYTE	RANGE (ppm•hr)
384008	Ammonia	3 - 600
384006	Carbon Monoxide	4 - 630
384005	Chlorine	0.2 - 20
384001	Formaldehyde	0.3 - 40
384002	Hydrogen Sulfide	0.4 - 350
384003	Mercury	0.12 - 3.2[2]

MORPHIX® TECHNOLOGIES

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