

3M BRAND ORGANIC VAPOR MONITOR

PRODUCT NO. 3500

Qualification Data for Vinyl Chloride

SAMPLING AND ANALYSIS INFORMATION

Monitor Sampling Rate	40.7 cm ³ /min.
Recovery Coefficient	0.90 in CS ₂
Upper Exposure Limit (1)	187 mg. (30 ppm-hours)

COMPOUND PROPERTIES AND DATA

Molecular Weight	62.50
Published Diffusion Constant (2)	Not Available
Density	—
T.W.A. (TLV)	1.0 ppm

SPECIAL CONSIDERATIONS

Sample Storage Precautions	None
Humidity Effects	Upper Exposure Limit Substantially Reduced
The Upper Exposure Limit at 90 % R.H. is	5 ppm-hours
Ceiling Level Monitoring (3)	Not Recommended

CALCULATION PROCEDURE

A = mass of analyte in micrograms
B = sampling time in minutes
Substitute A & B into equations below:

$$\frac{\text{mg}}{\text{m}^3} = \frac{24.57 \times A}{\text{recovery coefficient} \times B} = \frac{27.30 \times A}{B}$$
$$\text{ppm}^{(4)} = \frac{9.61 \times A}{\text{recovery coefficient} \times B} = \frac{10.68 \times A}{B}$$

Footnotes:

- (1) This number is the highest concentration of the compound actually measured by the 3M Lab.
- (2) Diffusion constants are provided for general interest. They are not required in the calculation procedure.
- (3) A minimum sampling time of 15 minutes is required.
- (4) ppm based on 25 °C. 760 mm Hg.